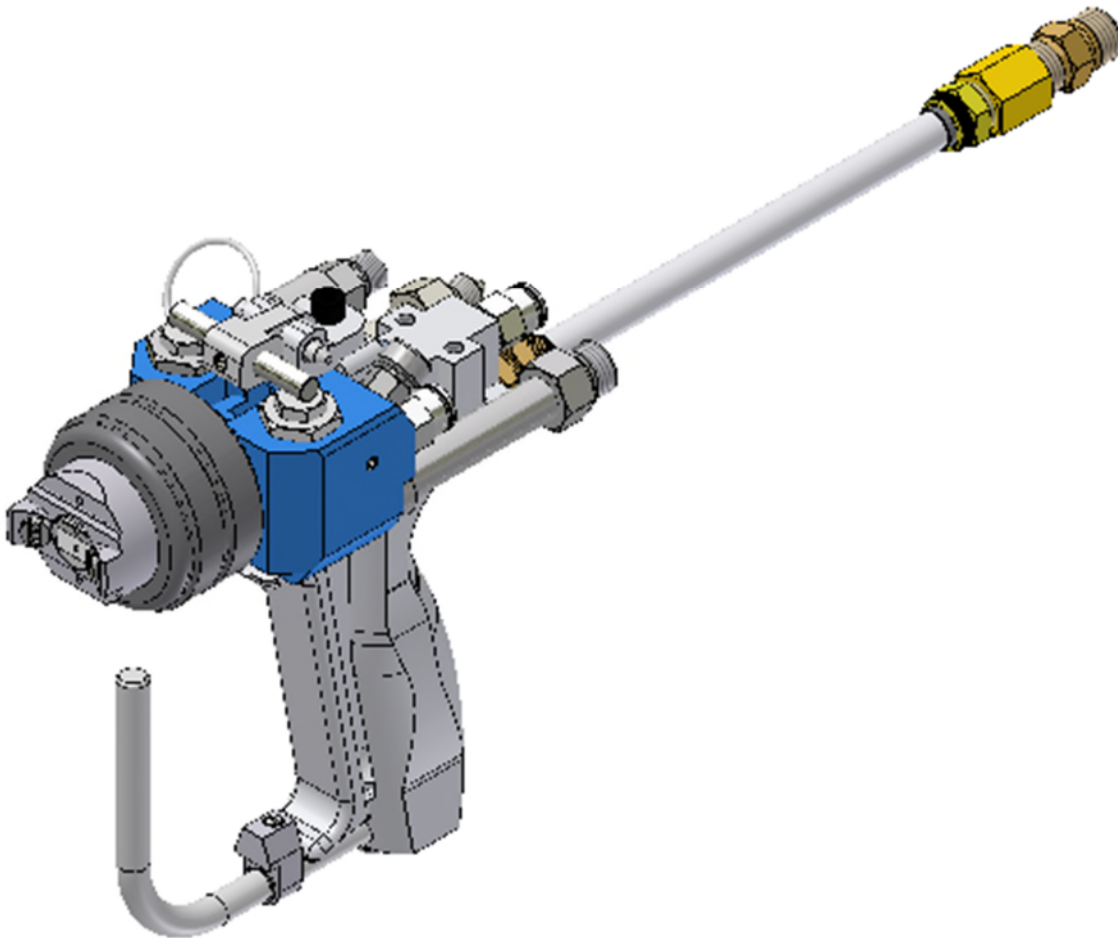


# External Mix Talon Gun

## Operations Manual

This manual is applicable to the following models:

- TLN2-XC-200
- TLN2-XC-200S
- TLN2-XG-200
- TLN2-XG-200S
- TLN2-XG-300
- TLN2-XG-300S





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[www.mvpind.com/mvp-international](http://www.mvpind.com/mvp-international)

*Use of this product confirms that Magnum Venus Products, Inc.'s standard terms and conditions of sale apply.*

# Table of Contents

<b>Section</b>	<b>Page</b>
• <b>Table of Contents</b>	<b>3</b>
• <b>Safety &amp; Warning Information</b>	<b>4</b>
• <b>Introduction</b>	<b>15</b>
• <b>Disassembling Gun</b>	<b>16</b>
• <b>Selecting a Chopper</b>	<b>20</b>
• <b>Adjusting Spray Fan</b>	<b>21</b>
• <b>Troubleshooting</b>	<b>21</b>
• <b>Parts Drawings</b>	<b>24</b>

# Safety & Warning Information

## Warnings

Due to the vast number of chemicals that could be used and their varying chemical reactions, the buyer and user of this equipment should determine all factors relating to the fluids used, including any of the potential hazards involved. Particular inquiry and investigation should be made into potential dangers relating to toxic fumes, fires, explosions, reaction times, and exposure of human beings to the individual components or their resultant mixtures. MVP assumes no responsibility for loss, damage, expense or claims for bodily injury or property damage, direct or consequential, arising from the use of such chemical components.

The end user is responsible for ensuring that the end product or system complies with all the relevant laws in the country where it is to be used and that all documentation is adhered to.

### **Recommended Occupational Safety & Health Act (OSHA) Documentation:**

- 1910.94                      Pertaining to ventilation
- 1910.106                    Pertaining to flammable liquids
- 1910.107                    Pertaining to spray finishing operations, particularly paragraph (m), Organic Peroxides and Dual Component Coatings

For Additional information, contact the Occupational Safety and Health Administration (OSHA) at <https://www.osha.gov/about.html>.

### **Recommended National Fire Protection Association (NFPA) Documentation:**

- NFPA No.33 Chapter 14                      Organic Peroxides and Dual Component Materials
- NFPA No. 63                                    Dust Explosion Prevention
- NFPA No. 70                                    National Electrical Code
- NFPA No. 77                                    Static Electricity
- NFPA No. 91                                    Blower and Exhaust System
- NFPA No. 654                                    Plastics Industry Dust Hazards

**Fire Extinguisher** – code ABC, rating number 4a60bc using Extinguishing Media –Foam, Carbon Dioxide, Dry Chemical, Water Fog, is recommended for this product and applications.

The following general warnings and guidelines are for the setup, use, grounding, maintenance, and repair of equipment. Additional product-specific warnings may be found throughout this manual as applicable. Please contact your nearest MVP Technical Service Representative if additional information is needed.

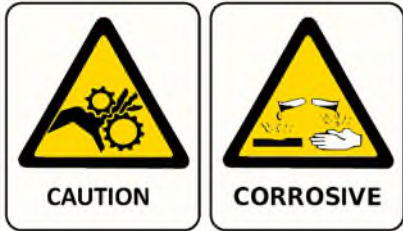
**Safety Precautions**

- Avoid skin contact and inhalation of all chemicals.
- Review Material Safety Data Sheet (MSDS) to promote the safe handling of chemicals in use.
- Restrict the use of all chemicals to designated areas with good ventilation.
- Chemicals are flammable and reactive.
- Noxious fumes released when combusted.
- Operate equipment in a ventilated environment only.
- Uncured liquid resins are highly flammable unless specifically labeled otherwise.
- Cured laminate, accumulations of overspray, and laminate sandings are highly combustible.
- Do not operate or move electrical equipment when flammable fumes are present.
- Ground all equipment.
- If a spark is seen or felt, immediately halt operation. Do not operate the equipment until the issue has been identified and repaired.
- Contaminated catalyst may cause fire or explosion.
- Containers may explode if exposed to fire / heat.
- Use and store chemicals away from heat, flames, and sparks.
- Do not smoke in work areas or near stored chemicals.
- Do not mix Methyl Ethyl Ketone Peroxide (MEKP) with materials other than polyethylene.
- Do not dilute MEKP.
- Keep food and drink away from work area.



**Physical Hazards**

- Never look directly into the spray gun fluid tip. Serious injury or death can result.
- Never aim the spray gun at or near another person. Serious injury or death can result.
- Chemical compounds can be severely irritating to the eyes and skin.
- Inhalation, ingestion, or injection may damage internal organs and lead to pulmonary disorders, cancers, lymphomas, and other diseases or health conditions.
- Other potential health effects include: irritation of the eyes and upper respiratory tract, headache, light-headedness, dizziness, confusion, drowsiness, nausea, vomiting, and occasionally abdominal pain.
- Eye contact: Immediately flush with water for at least 15 minutes and seek immediate medical attention.
- Skin Contact: Immediately wash with soap and water and seek immediate medical attention.
- Inhalation: Move the person to fresh air and seek immediate medical attention.
- Do not remove shields, covers, or safety features on equipment that is in use.
- Never place fingers, hands, or any body part near or directly in front of the spray gun fluid tip. The force of the liquid as it exits the spray tip can shoot liquid through the skin.
- Keep hands and body parts away from any moving equipment or components.
- Do not stand under plunger
- An improperly loaded drum may lead to an imbalance, causing a unit to tip over



**Personal Protective Equipment (PPE)**

- MVP recommends the use of personal safety equipment with all products in our catalog.
- Wear safety goggles, hearing protection, a respirator, and chemical resistant gloves.
- Wear long sleeve shirts or jackets and pants to minimize skin exposure.
- PPE should be worn by operators and service technicians to reduce the risk of injury.



For Additional information, contact the Occupational Safety and Health Administration (OSHA). <https://www.osha.gov/about.html>

## Symbol Definitions



Indicates the risk of contact with chemicals that are hazardous, which may lead to injury or death.



Indicates the risk of contact with voltage / amperage that may lead to serious injury or death.



Indicates that the materials being used are susceptible to combustion.



Indicates the risk of contact with moving components that may lead to serious injury or death.



Indicates that the system or component should be grounded before proceeding with use or repair.



Indicates the use of lit cigarettes or cigars is prohibited, because the materials being used are susceptible to combustion.



Indicates that the materials and/or the process being performed can lead to ignition and explosion.



A recommendation for the use of Personal Protective Equipment (PPE) before using or repairing the product.

# Polymer Matrix Materials: Advanced Composites

Potential health hazards associated with the use of advanced composites can be controlled through the implementation of an effective industrial hygiene and safety program.

[https://www.osha.gov/dts/osta/otm/otm\\_iii/otm\\_iii\\_1.html#t\\_iii:1\\_1](https://www.osha.gov/dts/osta/otm/otm_iii/otm_iii_1.html#t_iii:1_1)

<b>Resins</b>		
<b>Composite Component</b>	<b>Organ System Target (Possible Target)</b>	<b>Known (Possible) Health Effect</b>
Epoxy resins	Skin, lungs, eyes	Contact and allergic dermatitis, conjunctivitis
Polyurethane resins	Lungs, skin, eyes	Respiratory sensitization, contact dermatitis, conjunctivitis
Phenol formaldehyde	Skin, lungs, eyes	As above (potential carcinogen)
Bismaleimides (BMI)	Skin, lungs, eyes	As above (potential carcinogen)
Polyamides	Skin, lungs, eyes	As above (potential carcinogen)
<b>Reinforcing materials</b>		
<b>Composite Component</b>	<b>Organ System Target (Possible Target)</b>	<b>Known (Possible) Health Effect</b>
Aramid fibers	Skin (lungs)	Skin and respiratory irritation, contact dermatitis (chronic interstitial lung disease)
Carbon/graphite fibers	Skin (lungs)	As noted for aramid fibers
Glass fibers (continuous filament)	Skin (lungs)	As noted for aramid fibers
<b>Hardeners and curing agents</b>		
<b>Composite Component</b>	<b>Organ System Target (Possible Target)</b>	<b>Known (Possible) Health Effect</b>
Diaminodiphenylsulfone	N/A	No known effects with workplace exposure
Methylenedianiline	Liver, skin	Hepatotoxicity, suspect human carcinogen
<b>Other aromatic amines</b>		
<b>Composite Component</b>	<b>Organ System Target (Possible Target)</b>	<b>Known (Possible) Health Effect</b>
Meta-phenylenediamine (MPDA)	Liver, skin (kidney, bladder)	Hepatitis, contact dermatitis (kidney and bladder cancer)
Aliphatic and cyclo-aliphatic amines	Eyes, skin	Severe irritation, contact dermatitis
Polyaminoamide	Eyes, skin	Irritation (sensitization)
Anhydride	Eyes, lungs, skin	Severe eye and skin irritation, respiratory sensitization, contact dermatitis



## Catalyst - Methyl Ethyl Ketone Peroxide (MEKP)

MEKP is among the more hazardous materials found in commercial channels. The safe handling of the “unstable (reactive)” chemicals presents a definite challenge to the plastics industry. The highly reactive property which makes MEKP valuable to the plastics industry in producing the curing reaction of polyester resins also produces the hazards which require great care and caution in its storage, transportation, handling, processing and disposal. MEKP is a single chemical. Various polymeric forms may exist which are more or less hazardous with respect to each other. These differences may arise not only from different molecular structures (all are, nevertheless, called “MEKP”) and from possible trace impurities left from the manufacture of the chemicals, but may also arise by contamination of MEKP with other materials in its storage or use. Even a small amount of contamination with acetone, for instance, may produce an extremely shock-sensitive and explosive compound.



### **WARNING**

***Contamination with promoters, materials containing promoters (such as laminate sandings), or with any readily oxidizing material (such as brass or iron) will cause exothermic redox reactions which can be explosive in nature. Heat applied to MEKP or heat buildup from contamination reactions can cause the material to reach its Self-Accelerating Decomposition Temperature (SADT).***

Researchers have reported measuring pressure rates-of-rise well over 100,000 psi per second when certain MEKP's reach their SADT. For comparison, the highest-pressure rate-of-rise listed in NFPA Bulletin NO.68, “Explosion Venting”, is 12,000 psi per second for an explosion of 12% acetylene and air. The maximum value listed for a hydrogen explosion is 10,000 psi per second. Some forms of MEKP, if allowed to reach their SADT, will burst even an open topped container. This suggests that it is not possible to design a relief valve to vent this order of magnitude of pressure rate-of-rise. The user should be aware that any closed container, be it a pressure vessel, surge chamber, or pressure accumulator, could explode under certain conditions. There is no engineering substitute for care by the user in handling organic peroxide catalysts. If, at any time, the pressure relieve valve on top of the catalyst tank should vent, the area should be evacuated at once and the fire department called. The venting could be the first indication of a heat, and therefore, pressure build-up that could eventually lead to an explosion. Moreover, if a catalyst tank is sufficiently full when the pressure relief valve vents, some catalyst may spray out, which could cause eye injury. For this reason, and many others, anyone whose job puts them in an area where this vented spray might go, should always wear full eye protection even when laminating operations are not taking place.

Safety in handling MEKP depends to a great extent on employee education, proper safety instructions, and safe use of the chemicals and equipment. Workers should be thoroughly informed of the hazards that may result from improper handling of MEKP, especially regarding contamination, heat, friction and impact. They should be thoroughly instructed regarding the proper action to be taken in the storage, use, and disposal of MEKP and other hazardous materials used in the laminating operation. In addition, users should make every effort to:

- Store MEKP in a cool, dry place in original containers away from direct sunlight and away from other chemicals.
- Keep MEKP away from heat, sparks, and open flames.
- Prevent contamination or MEKP with other materials, including polyester over spray and sandings, polymerization accelerators and promoters, brass, aluminum, and non-stainless steels.

- Never add MEKP to anything that is hot, since explosive decomposition may result.
- Avoid contact with skin, eyes, and clothing. Protective equipment should be worn at all times. During clean-up of spilled MEKP, personal safety equipment, gloves, and eye protection must be worn. Firefighting equipment should be at hand and ready.
- Avoid spillage, which can heat up to the point of self-ignition.
- Repair any leaks discovered in the catalyst system immediately, and clean-up the leaked catalyst at once in accordance with the catalyst manufacturer's instructions.
- Use only original equipment or equivalent parts from Magnum Venus Products in the catalyst system (i.e.: hoses, fitting, etc.) because a dangerous chemical reaction may result between substituted parts and MEKP.
- Catalyst accumulated from the purging of hoses or the measurement of fluid output deliveries should never be returned to the supply tank, such catalyst should be diluted with copious quantities of clean water and disposed of in accordance with the catalyst manufacturer's instructions.

The extent to which the user is successful in accomplishing these ends and any additional recommendations by the catalyst manufacturer determines largely the safety that will be present in his operation.

## Clean-Up Solvents and Resin Diluents



### **WARNING**

***A hazardous situation may be present in your pressurized fluid system! Hydro carbon solvents can cause an explosion when used with aluminum or galvanized components in a closed (pressurized) fluid system (pump, heaters, filters, valves, spray guns, tanks, etc.). An explosion could cause serious injury, death, and/or substantial property damage. Cleaning agents, coatings, paints, etc. may contain Halogenated Hydrocarbon solvents. Some Magnum Venus Products spray equipment includes aluminum or galvanized components and will be affected by Halogenated Hydrocarbon solvents.***

There are three key elements to the Halogenated Hydrocarbon (HHC) solvent hazard.

- |    |   |  |
|----|---|--|
| 1. | The presence of HHC solvents.               | 1,1,1 – Trichloroethane and Methylene Chloride are the most common of these solvents. However, other HHC solvents are suspect if used; either as part of paint or adhesives formulation, or for clean-up flushing.   |
| 2. | Aluminum or Galvanized Parts.               | Most handling equipment contains these elements. In contact with these metals, HHC solvents could generate a corrosive reaction of a catalytic nature.   |
| 3. | Equipment capable of withstanding pressure. | When HHC solvent contact aluminum or galvanized parts inside a closed container such as a pump, spray gun, or fluid handling system, the chemical reaction can, over time, result in a build-up of heat and pressure, which can reach explosive proportions. When all three elements are present, the result can be an extremely violent explosion. The reaction can be sustained with very little aluminum or galvanized metal; any amount of aluminum is too much. |
- The reaction is unpredictable. Prior use of an HHC solvent without incident (corrosion or explosion) does NOT mean that such use is safe. These solvents can be dangerous alone (as a

clean-up or flushing agent) or when used as a component or a coating material. There is no known inhibitor that is effective under all circumstances. Mixing HHC solvents with other materials or solvents such as MEKP, alcohol, or toluene may render the inhibitors ineffective.

- The use of reclaimed solvents is particularly hazardous. Reclaimers may not add any inhibitors. The possible presence of water in reclaimed solvents could also feed the reaction.
- Anodized or other oxide coatings cannot be relied upon to prevent the explosive reaction. Such coatings can be worn, cracked, scratched, or too thin to prevent contact. There is no known way to make oxide coatings or to employ aluminum alloys to safely prevent the chemical reaction under all circumstances.
- Several solvent suppliers have recently begun promoting HHC solvents for use in coating systems. The increasing use of HHC solvents is increasing the risk. Because of their exemption from many state implementation plans as Volatile Organic Compounds (VOCs), their low flammability hazard, and their not being classified as toxic or carcinogenic substances, HHC solvents are very desirable in many respects.



### **WARNING**

***Do not use Halogenated Hydrocarbon (HHC) solvents in pressurized fluid systems having aluminum or galvanized wetted parts.***

***Magnum Venus Products is aware of NO stabilizers available to prevent HHC solvents from reaction under all conditions with aluminum components in closed fluid systems. HHC solvents are dangerous when used with aluminum components in a closed fluid system.***

- Consult your material supplier to determine whether your solvent or coating contains Halogenated Hydrocarbon solvents.
- Magnum Venus Products recommends that you contact your solvent supplier regarding the best non-flammable clean-up solvent with the heat toxicity for your application.
- If, however, you find it necessary to use flammable solvents, they must be kept in approved, electrically grounded containers.
- Bulk solvent should be stored in a well-ventilated, separate building, 50 feet away from your main plant.
- You should only allow enough solvent for one day's use in your laminating area.
- NO SMOKING signs must be posted and observed in all areas of storage or where solvents and other flammable materials are used.
- Adequate ventilation (as covered in OSHA Section 1910.94 and NFPA No.91) is important wherever solvents are stored or used, to minimize, confine and exhaust the solvent vapors.
- Solvents should be handled in accordance with OSHA Section 1910.106 and 1910.107.

## Catalyst Diluents

Magnum Venus Products spray-up and gel-coat systems currently produced are designed so that catalyst diluents are not required. Magnum Venus Products therefore recommends that diluents not be used to avoid possible contamination which could lead to an explosion due to the handling and mixing of MEKP and diluents. In addition, it eliminates any problems from the diluent being contaminated through rust particles in drums, poor quality control on the part of the diluents suppliers, or any other reason. If diluents are absolutely required, contact your catalyst supplier and follow his instructions explicitly. Preferably the supplier should premix the catalyst to prevent possible "on the job" contamination while mixing.



**WARNING**

*If diluents are not used, remember that catalyst spillage and gun, hose, and packing leaks are potentially more hazardous since each drop contains a higher concentration of catalyst and will therefore react more quickly with overspray and the leak.*

**Cured Laminate, Overspray and Laminate Sandings Accumulation**

- Remove all accumulations of overspray, Fiberglass Reinforced Plastic (FRP) sandings, etc. from the building as they occur. If this waste is allowed to build up, spillage of catalyst is more likely to start a fire; in addition, the fire would burn hotter and longer.
- Floor coverings, if used, should be non-combustible.
- Spilled or leaked catalyst may cause a fire if it comes in contact with an FRP product, oversprayed chop or resin, FRP sandings or any other material with MEKP.

To prevent spillage and leakage, you should:

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Maintain your Magnum Venus Products System.</li> </ol>   | <p>Check the gun several times daily for catalyst and resin packing or valve leaks. <b>REPAIR ALL LEAKS IMMEDIATELY.</b></p>   |
| <ol style="list-style-type: none"> <li>2. Never leave the gun hanging over or lying inside the mold.</li> </ol>  | <p>A catalyst leak in this situation would certainly damage the part, possibly the mold, and may cause a fire.</p>   |
| <ol style="list-style-type: none"> <li>3. Inspect resin and catalyst hoses daily for wear or stress at the entry and exits of the boom sections and at the hose and fittings.</li> </ol> | <p>Replace if wear or weakness is evident or suspected.</p>  |
| <ol style="list-style-type: none"> <li>4. Arrange the hoses and fiberglass roving guides so that the fiberglass strands DO NOT rub against any of the hoses at any point.</li> </ol>     | <p>If allowed to rub, the hose will be cut through, causing a hazardous leakage of material which could increase the danger of fire. Also, the material may spew onto personnel in the area.</p> |

**Toxicity of Chemicals**

- Magnum Venus Products recommends that you consult OSHA Sections 1910.94, 1910.106, 1910.107 and NFPA No.33, Chapter 14, and NFPA No.91.
- Contact your chemical supplier(s) and determine the toxicity of the various chemicals used as well as the best methods to prevent injury, irritation and danger to personnel.
- Also determine the best methods of first aid treatment for each chemical used in your plant.

**Equipment Safety**

Magnum Venus Products suggest that personal safety equipment such as EYE GOGGLES, GLOVES, EAR PROTECTION, and RESPIRATORS be worn when servicing or operating this equipment. Ear protection should be worn when operating a fiberglass chopper to protect against hearing loss since noise levels can be as high as 116 dB (decibels). This equipment should only be operated or serviced by technically trained personnel!



**CAUTION**

*Never place fingers, hands, or any body part near or directly in front of the spray gun fluid tip. The force of the liquid as it exits the spray tip can cause serious injury by shooting liquid through the skin. NEVER LOOK DIRECTLY INTO THE GUN SPRAY TIP OR POINT THE GUN AT OR NEAR ANOTHER PERSON OR AN ANIMAL.*



**DANGER**

*Contaminated catalyst may cause fire or explosion. Before working on the catalyst pump or catalyst accumulator, wash hands and tools thoroughly. Be sure work area is free from dirt, grease, or resin. Clean catalyst system components with clean water daily.*



**DANGER**

*Eye, skin, and respiration hazard. The catalyst MEKP may cause blindness, skin irritation, or breathing difficulty. Keep hands away from face. Keep food and drink away from work area.*

**Treatment of Chemical Injuries**



**CAUTION**

*Refer to your catalyst manufacturer's safety information regarding the safe handling and storage of catalyst. Wear appropriate safety equipment as recommended.*

Great care should be used in handling the chemicals (resins, catalyst and solvents) used in polyester systems. Such chemicals should be treated as if they hurt your skin and eyes and as if they are poison to your body. For this reason, Magnum Venus Products recommends the use of protective clothing and eye wear in using polyester systems. However, users should be prepared in the event of such an injury.

**Precautions include:**

1. Know precisely what chemicals you are using and obtain information from your chemical supplier on what to do in the event the chemical gets onto your skin or into the eyes, or if swallowed.
2. Keep this information together and easily available so that it may be used by those administering first aid or treating the injured person.
3. Be sure the information from your chemical supplier includes instructions on how to treat any toxic effects the chemicals have.



**WARNING**

*Contact your doctor immediately in the event of an injury. If the product's MSDS includes first aid instructions, administer first aid immediately after contacting a doctor.*



Fast treatment of the outer skin and eyes that contact chemicals generally includes immediate and thorough washing of the exposed skin and immediate and continuous flushing of the eyes with lots of clean water for at least 15 minutes or more. These general instructions of first aid treatment may be incorrect for some chemicals; you must know the chemicals and treatment before an accident occurs. Treatment for swallowing a chemical frequently depends upon the nature of the chemical.

## Emergency Stop Procedure

In an emergency, follow these steps to stop a system:

1. The ball valve located where the air enters the power head of the resin pump, should be moved to the “OFF” or closed position.

**Note**      ***The “open” or “on” position is when the ball valve handle is parallel (in line) with the ball valve body. The “closed” or “off” position is when the ball valve handle is perpendicular (across) the ball valve body.***

2. Turn all system regulators to the “OFF” position (counter-clockwise) position.
3. Verify / secure the catalyst relief line, located on the catalyst relief valve.
4. Verify / secure the resin return line, located on the resin filter.
5. Place a container under the resin pump ball valve to catch ejected resin.
6. Locate the ball valve on the resin pump.
7. Rotate the ball valve 90 degrees to the “On” or open position.

## Grounding

Grounding an object means providing an adequate path for the flow of the electrical charge from the object to the ground. An adequate path is one that permits charge to flow from the object fast enough that it will not accumulate to the extent that a spark can be formed. It is not possible to define exactly what will be an adequate path under all conditions since it depends on many variables. In any event, the grounding means should have the lowest possible electrical resistance.

Grounding straps should be installed on all loose conductive objects in the spraying area. This includes material containers and equipment. Magnum Venus Products recommends grounding straps be made of AWG No.18 stranded wire as a minimum and the larger wire be used where possible. NFPA Bulletin No77 states that the electrical resistance of such a leakage path should be 1 meg ohm ( $10^6$  ohms) or less.



### CAUTION

***Whenever flammable or combustible liquids are transferred from one container to another, or from one container to the equipment, both containers or container and equipment shall be effectively bonded and grounded to dissipate static electricity. For further information, see National Fire Protection Association (NFPA) 77, titled “Recommended Practice on Static Electrical”. Refer especially to section 7-7 titled “Spray Application of Flammable and Combustible Materials”.***

# Introduction

This manual provides information for the operation, maintenance, and simple repair of the MVP External Mix Talon Gun. The following procedures are included:

- Step-by-step assembly and disassembly
- Troubleshooting information



Please read this manual carefully and retain for future reference. Follow the steps in the order given, otherwise you may damage the equipment or injure yourself.

## During Disassembly

As you disassemble the gun, lay out the components on a clean surface in the correct order and direction to aid in reassembly. Refer to a current parts drawing for your model to ensure you have the correct part numbers if replacement parts are needed.

## Requirements

You will need the following tools:

- $\frac{7}{16}$ " wrench
- $\frac{11}{16}$ " wrench
- Hex wrench/Allen key set
- 8" adjustable wrench
- Flathead screwdriver
- Scribe set

You will need appropriate cleaning materials, including solvent, clean shop towels or rags, a small brush, and empty containers into which you can flush the gun. You will also need the appropriate seal kit for your gun to replace seals during reassembly. Refer to the parts drawing for your gun to obtain the correct part numbers for the O-rings and seals you need.

## Gun Assemblies

This manual covers the following assemblies:

External Mix Talon Guns	
Part Number	Description
TLN2-XC-200	Talon External Mix Chop Gun with FIT Chop Configuration – No Signal
TLN2-XC-200S	Talon External Mix Chop Gun with FIT Chop Configuration – with Signal
TLN2-XG-200	Talon External Mix Gelcoat Gun with FIT Gelcoat Configuration – No Signal
TLN2-XG-200S	Talon External Mix Gelcoat Gun with FIT Gelcoat Configuration – with Signal
TLN2-XG-300	Talon External Mix Gelcoat Gun with Airless Configuration – No Signal
TLN2-XG-300S	Talon External Mix Gelcoat Gun with Airless Configuration – with Signal

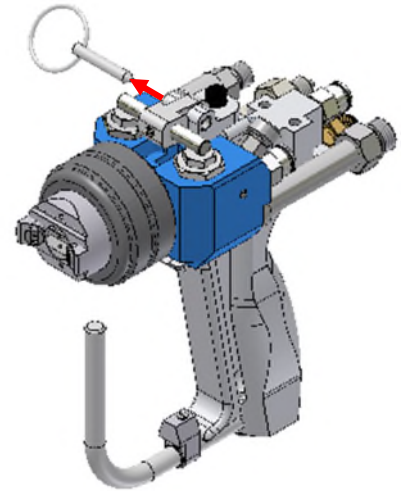
# Disassembling Gun



## **WARNING**

***Always remove fluid and air pressure before disconnecting the gun or working on the unit.***

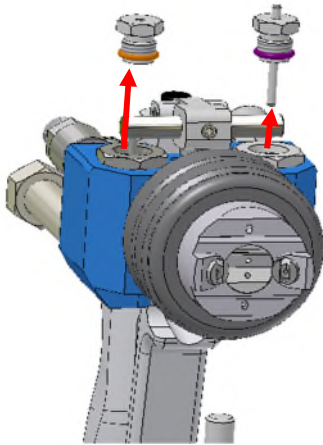
1. Remove the quick pin from the top of the trigger arm assembly and push the trigger assembly forward.



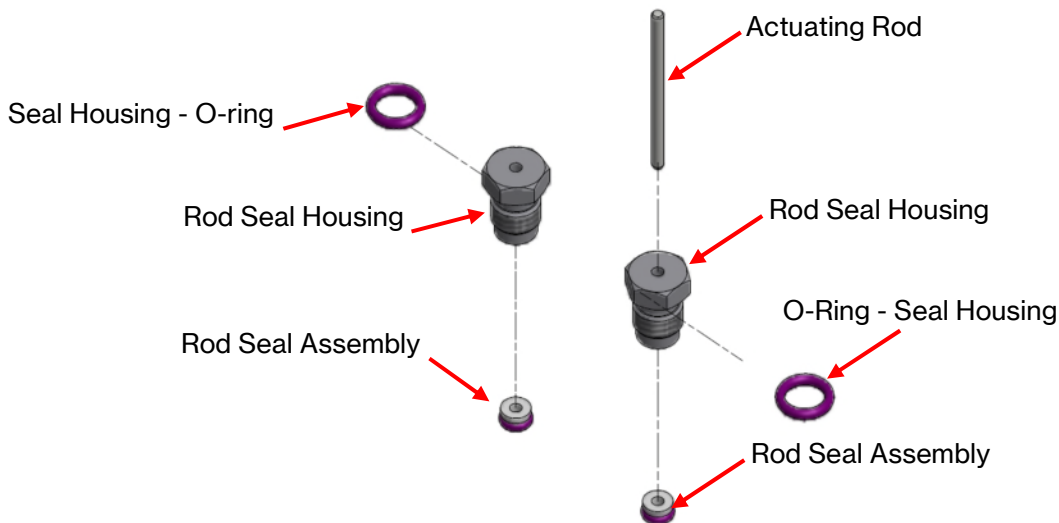
## Remove Rod Seal

2. Use a  $\frac{7}{16}$ " wrench to remove the rod seal housing(s).

**Note**     ***The actuating rod will come up with the housing.***



3. Remove rod seal assemblies and housing O-rings.



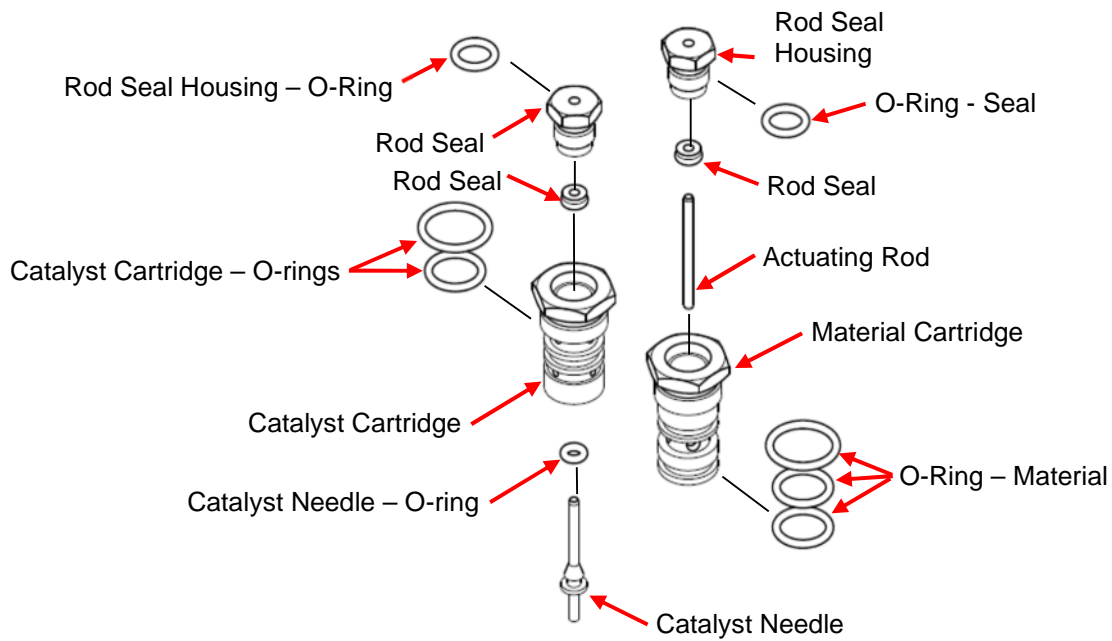
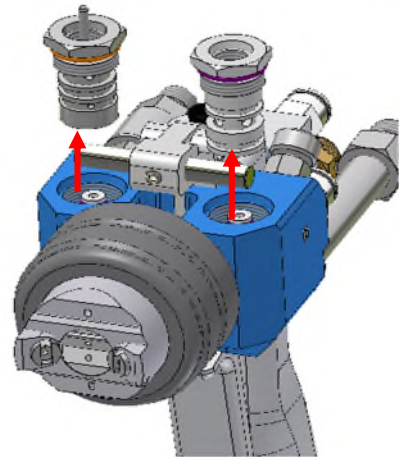


## Remove Cartridge

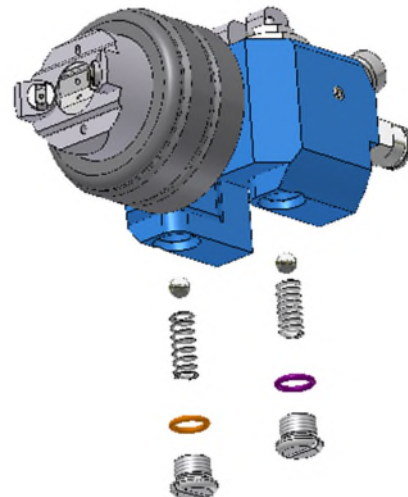
- Use an  $1\frac{1}{16}$ " wrench to remove cartridge housings.

**Note** *Catalyst needle will come up with the catalyst side cartridge.*

- Use a  $\frac{7}{16}$ " wrench to loosen the rod seal housings and remove.
- Remove the seat insert.
- Remove all O-rings.
- Lubricate replacement O-ring and seals and reassemble.



- Loosen the plugs at the bottom of the gun head and remove the spring and ball.
- Clean and inspect the spring and ball and replace as needed.
- Replace the O-ring on the plug body.
- Reinstall the ball, spring, and plug.



## Cartridge Assemblies

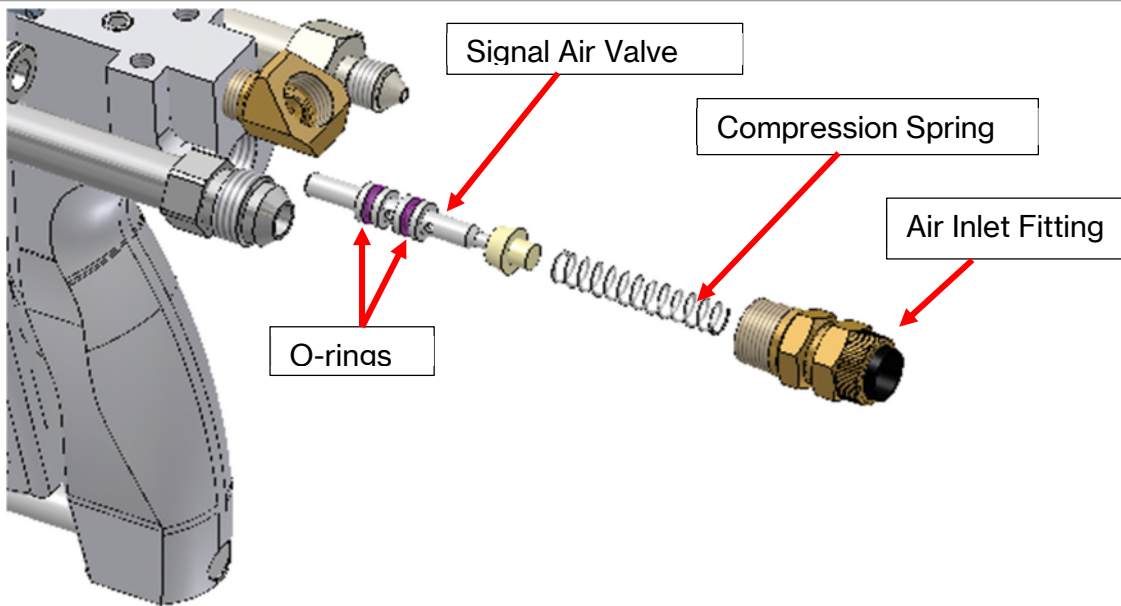
The following assemblies allow for quick rebuild of guns because they include everything except the ball and spring:

<b>TLN-X-CTR-M (Resin/Gel Cartridge) includes:</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
O-E-011	O-ring	1
O-E-013	O-ring	2
O-E-015	O-ring	1
TLN-2016	Actuation Rod	1
TLN-2021	Rod Seal Housing	1
TLN-2028-01	Material Cartridge	1
TLN-2029	Rod Seal Assembly	1

<b>TLN2-X-CTR-C (Catalyst Cartridge) includes:</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
O-A-007	O-ring	1
O-S-006	O-ring	1
O-S-011	O-ring	1
O-S-013	O-ring	2
O-S-015	O-ring	1
TLN2-2021	Rod Seal Housing	1
TLN2-2029	Rod Seal Assembly	1
TLN2-2048	Seat Insert	1
TLN2-2049	Needle Spring	1
TLN2-2082	Catalyst Needle	1
TLN2-2084	Catalyst Cartridge	1

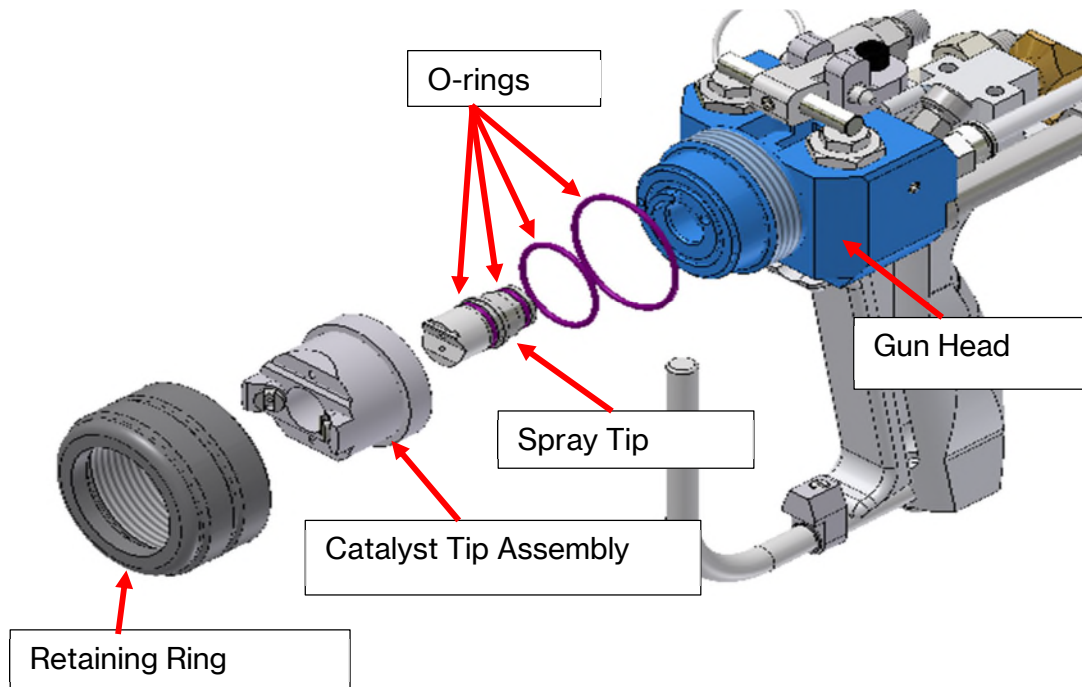
## Rebuild Handle Air Valve

13. Remove the air inlet fitting from the back of the gun handle.
14. Remove the compression spring and signal air valve from the handle.
15. Replace the O-rings on the air valve.

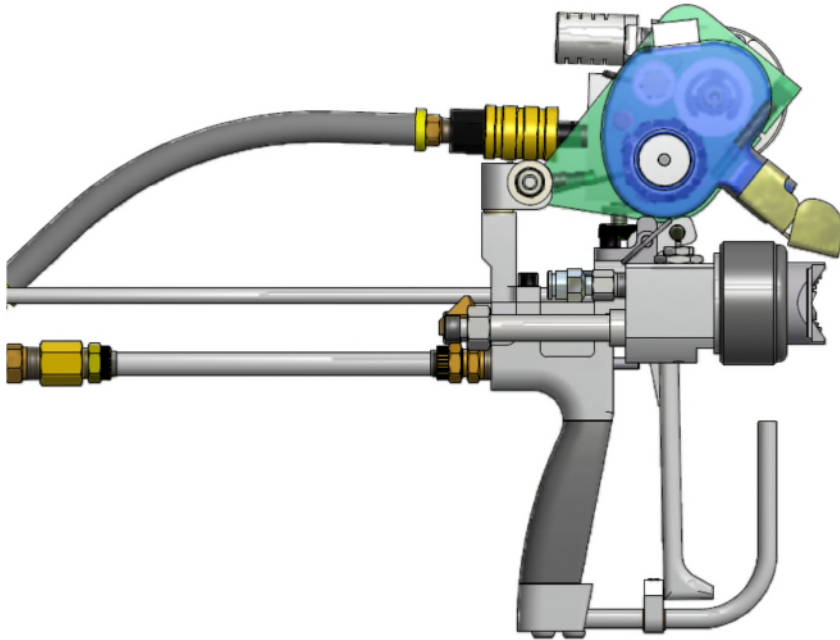


## Rebuild Front of Gun

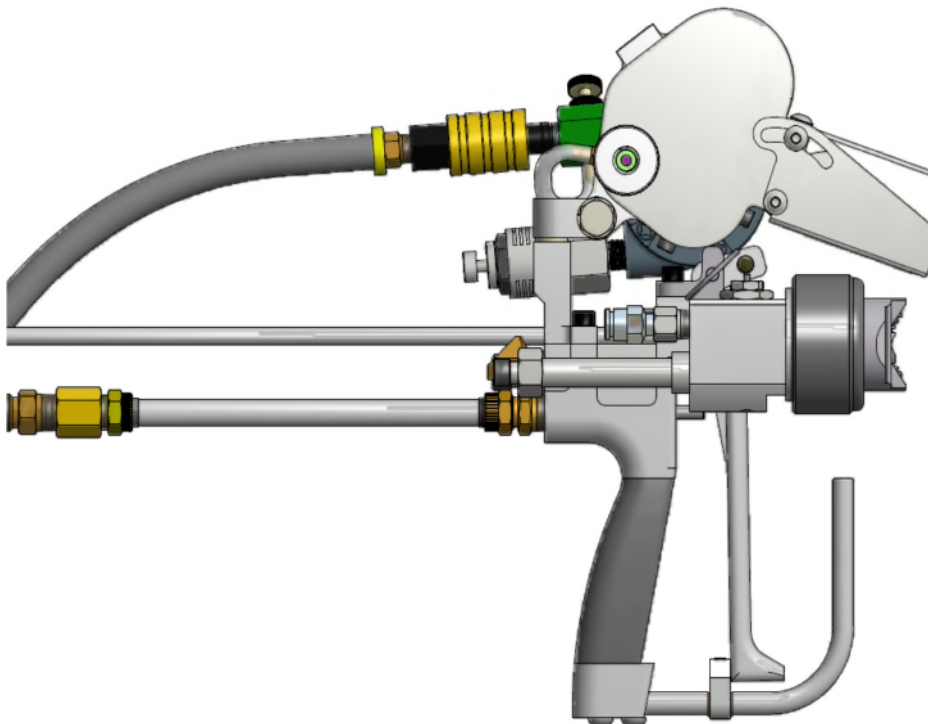
16. Brush solvent on the front of the catalyst tip and spray tip.
17. Unscrew the retaining ring from the front of the gun head.
18. Remove the catalyst tip from the front of the gun head.
19. Push the spray tip free of the catalyst tip (if it comes out with the catalyst tip).
20. Clean both tips.
21. Clean the front of the gun head.
22. Replace all O-rings and reassemble.



## Selecting a Chopper



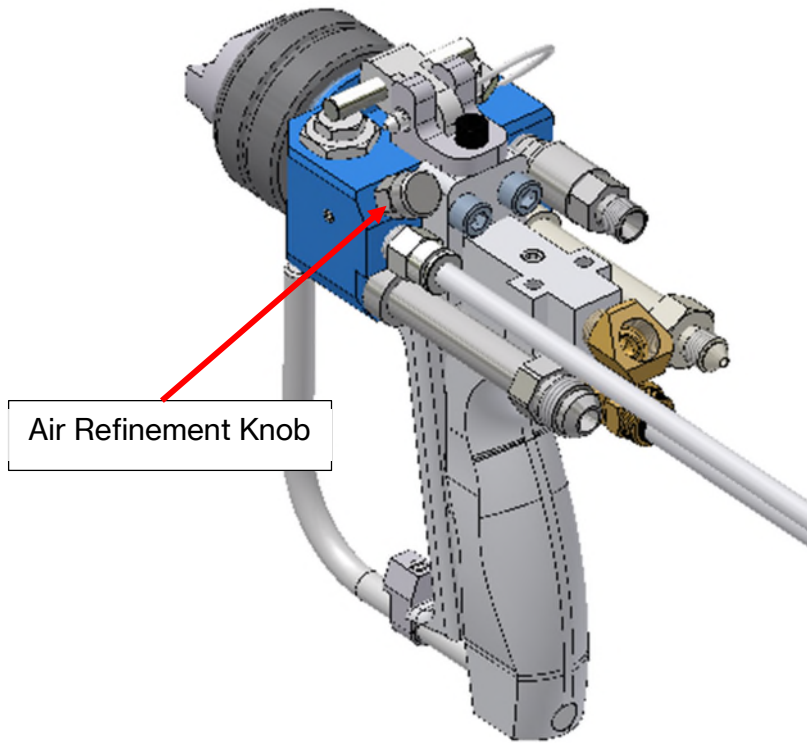
- RC-1000-TLN-XF
- RC-2000-TLN-XF
- HTC-1000-TLN-XF
- HTC-2000-TLN-XF



- VRC-1000-TLN-X
- VHTC-1000-TLN-X

## Adjusting Spray Fan

Follow your system manual's guidance for performing a proper spray test and troubleshooting the spray pattern. To make minor adjustments to the spray pattern, turn the air refinement knob on the back of the gun head.



## Troubleshooting

Catalyst Problems		
Symptom	Possible Cause	Remedy
Catalyst leaking around catalyst needle	Rod seal housing loose	Tighten rod seal housing
	Damaged rod seal assembly	Replace rod seal assembly
	Damaged catalyst needle	Replace catalyst needle
Catalyst leaking around rod seal housing	Rod seal housing loose	Tighten rod seal housing
	Damaged O-ring on rod seal housing	Replace O-ring
Catalyst leaking around catalyst cartridge	Catalyst cartridge loose	Tighten cartridge into gun head
	Damaged O-ring on catalyst cartridge	Replace O-ring and check gun head for damage
Catalyst leaking around plug on bottom of gun head	Damaged O-ring on plug body	Replace O-ring and check gun head for damage

Catalyst Problems		
Symptom	Possible Cause	Remedy
Catalyst leaking around catalyst fitting	Catalyst fitting loose	Tighten fitting into gun head
	Damaged O-ring on catalyst fitting	Replace O-ring and check gun head for damage
Catalyst leaking from front of gun block	Damaged O-ring inside seat insert	Replace O-ring
	Damaged or dirty ball in catalyst cartridge	Clean or replace catalyst ball as necessary
	Damaged compression spring	Replace compression spring in catalyst cartridge
	Damaged O-ring on seat insert	Replace O-ring and check gun head for damage
	Catalyst needle holding ball open	Check that catalyst needle is moving freely and not being pressed down by handle
Catalyst leaking into atomizing air tube	No atomizing air pressure	Make sure atomizing air pressure is set properly
		Make sure atomizing air hose is not blocked or kinked
	Blocked catalyst tip	Clean or replace catalyst tip as needed
	Blocked gun block porting	Check catalyst porting in gun block for blockage and clear
Leaking or stuck catalyst needle	Follow solutions above for catalyst leaking from front of gun block	
No catalyst from gun	Stuck or damaged catalyst needle	Check and repair needle as necessary
		Check catalyst ball and spring for damaged or blockage; clean or replace as needed
	Blocked catalyst tip	Clean or replace tip
No catalyst from gun	Gun head porting blocked	Check and clean gun head porting
	Blocked catalyst hose or fitting	Check hose and fitting for blockage or damage; clean hose/fitting or replace as needed
	Damaged or blocked catalyst check valve	Repair or replace check valve
	Catalyst pump not working correctly	Repair catalyst pump as needed
	Catalyst pump disconnected from slave drive	Connect catalyst pump to slave drive and set to proper percentage
		Connect slave drive to pump
Catalyst ball valve or relief valve open on catalyst manifold	Check ball valve and relief valve on catalyst manifold and close or repair as needed	



<b>Resin Problems</b>		
<b>Symptom</b>	<b>Possible Cause</b>	<b>Remedy</b>
Resin leaking around actuating rod	Rod seal housing loose	Tighten rod seal housing
	Damaged rod seal assembly	Replace rod seal assembly
	Damaged actuating rod	Replace actuating rod
Resin leaking around rod seal housing	Rod seal housing loose	Tighten rod seal housing
	Damaged O-ring on rod seal housing	Replace O-ring
Resin leaking around material cartridge	Material cartridge loose	Tighten cartridge into gun head
	Damaged O-ring on material cartridge	Replace O-ring and check gun head for damage
Resin leaking around plug on bottom of gun head	Damaged O-ring on plug body	Replace O-ring and check gun head for damage
Resin leaking around resin fitting	Resin fitting loose	Tighten fitting into gun head
	Damaged O-ring on resin fitting	Replace O-ring and check gun head for damage
Resin leaking from spray tip/front of gun block	Damaged O-ring on spray tip	Replace O-ring and check gun head for damage
	Damaged or dirty ball in material cartridge	Clean or replace material ball as necessary
	Damaged or dirty material seat in material cartridge	Remove material cartridge and check/clean ball seat
	Actuating rod holding ball open	Check that actuating rod is moving freely and not being pressed down by handle
	Stuck or damaged actuating rod	Check and repair actuating rod
	Damaged compression spring	Check and replace compression spring in material cartridge
No resin from gun	Blocked spray tip	Clean or replace tip
	Actuating rod not opening material ball	Check actuating rod for damage and check material cartridge and ball
	Gun head porting blocked	Check and clean gun head porting
	Blocked resin hose or fitting	Make sure resin hose and fitting not blocked or damaged; clear or replace as needed
	Resin pump not working correctly	Repair resin pump as needed
	Resin return ball valve open	Close ball valve located below resin filter

<b>General Problems</b>		
<b>Symptom</b>	<b>Possible Cause</b>	<b>Remedy</b>
Air leaking around air valve	Damaged O-ring on valve	Replace O-ring
		Check inside handle for scratches or damage
	Damaged or missing compression spring	Replace compression spring as needed

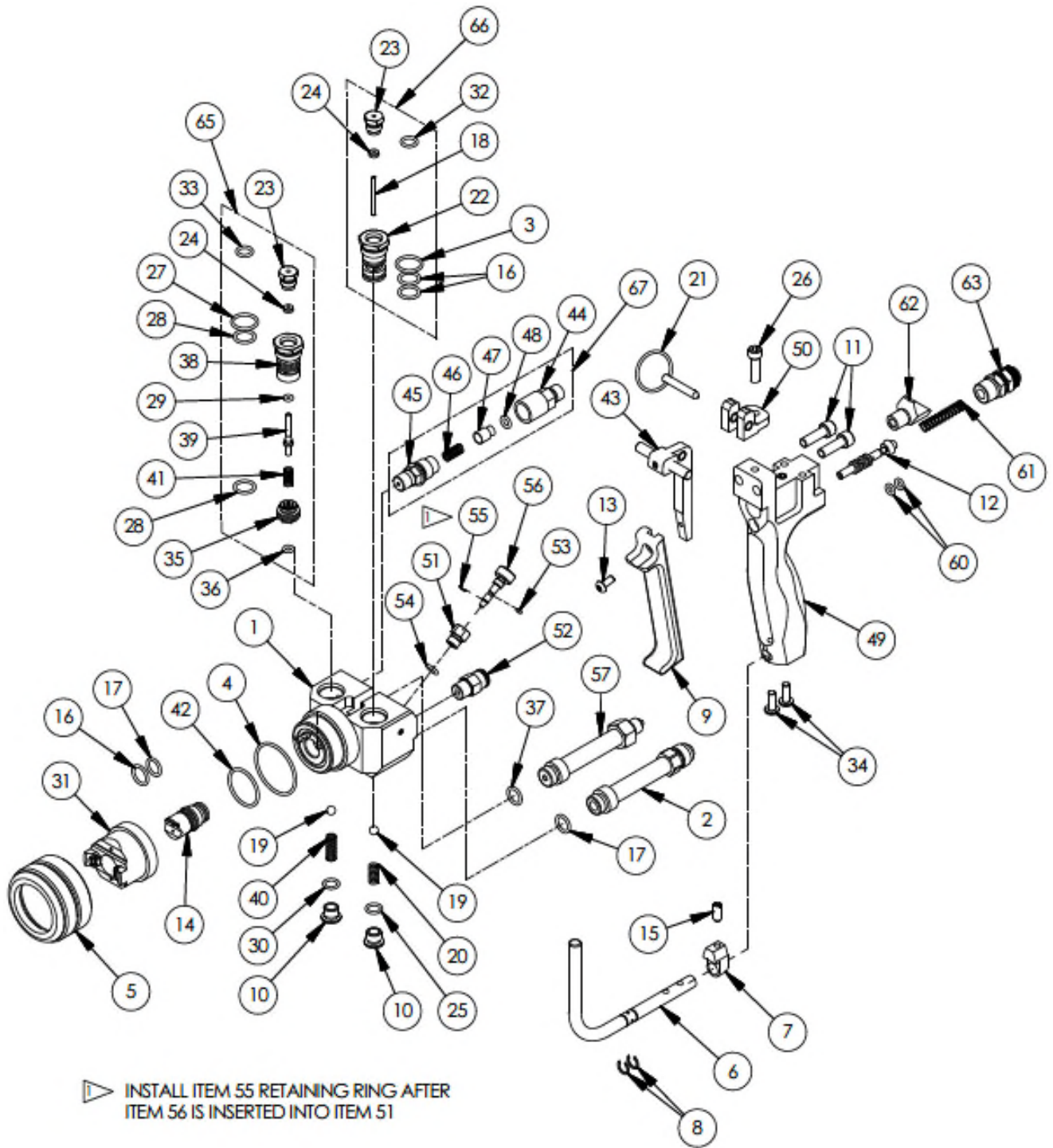
General Problems		
Symptom	Possible Cause	Remedy
Air leaking from catalyst needle	Rod seal assembly leaking	Replace rod seal assembly
	Damaged catalyst needle	Replace catalyst needle
Resin, catalyst, or air leaking around catalyst tip/retaining ring	Damaged O-ring between catalyst tip and gun head	Replace O-rings
		Check for damage on catalyst tip and gun head
Air assist not working	Air control valve not set	Slowly open air control valve to develop proper spray fan
	Blockage of air	Check air hose for kinks or leaks and replace as needed
		Check elbow fitting on gun head for blockage and clear as needed
		Check catalyst tip for blockage or damage and clear or replace as needed

## Parts Drawings

The following parts breakdown drawings are included for your reference:

Parts Drawings	
Part Number	Description
TLN2-XC-200	Talon External Mix FIT Chopper Assembly
TLN2-XC-200S	Talon External Mix FIT Chopper Assy – with Signal
TLN2-XG-200	Talon External Mix FIT Gel Gun Assembly
TLN2-XG-200S	Talon External Mix FIT Gel Gun Assy – with Signal
TLN2-XG-300	Talon External Mix Gel Gun Assembly
TLN2-XG-300S	Talon External Mix Gel Gun Assembly – with Signal
TLN-X-CTR-C	Catalyst Cartridge Assembly
TLN-X-CTR-M	Material Cartridge Assembly
TLN-1097-01	Talon Gun Check Valve
TLN2-X-SK	External Mix Seal Kit
TLN-X-TLN2-CK	Talon to Talon 2 Conversion Kit
Optional Accessories	
EXT-1000-TLN	Talon Gun Extension Assembly
EXT-FLEX-TLN-5	Talon Gun Flex Extension Assembly
EXT-1800-TLN	Talon Gun Extension Assembly





# MAGNUM VENUS PRODUCTS

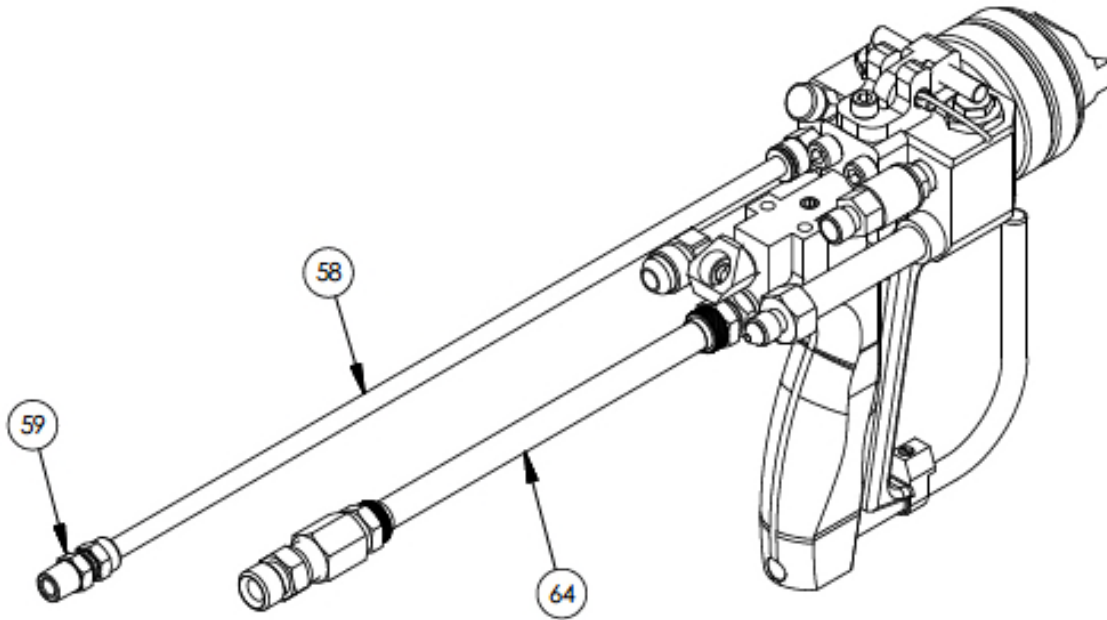
TALON EXTERNAL MIX CHOP GUN

TLN2-XC-200

REV: A 08/27/2018

SHEET 1 / 3

1/17/2018



# MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX CHOP GUN

TLN2-XC-200

REV: A 08/27/2018

SHEET 2 / 3

1/17/2018

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY
2	TLN-1005-F	1	FIT RESIN FITTING
* 3	O-E-015	1	O-RING
* 4	O-E-027	1	O-RING
5	TLN-2013	1	RETAINING RING
6	TLN-2009	1	TRIGGER GUARD
7	TLN-2036	1	TRIGGER STOP
8	TLN-1031	2	RETAINING RING
9	TLN-2065	1	TRIGGER
10	TLN-2006	2	PLUG
11	F-CS-04F-12	2	CAP SCREW
12	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW
14	TLN-XXXX	1	FIT TIP
15	LWG-6527	1	SPRING PLUNGER
* 16	O-E-013	3	O-RING
* 17	O-E-012	2	O-RING
18	TLN-2016	1	ACTUATING ROD
19	TLN-2043	2	CERAMIC BALL
20	TLN-2044	1	SPRING
21	F-QP-03-12	1	QUICK RELEASE PIN
22	TLN-2028-01	1	MATERIAL CARTRIDGE
23	TLN-2021	2	ROD SEAL HOUSING
* 24	TLN-2029	2	ROD SEAL ASSEMBLY
* 25	O-E-3-903	1	O-RING
26	F-CS-1224-12	1	CAP SCREW
* 27	O-S-015	1	O-RING
* 28	O-S-013	2	O-RING
* 29	O-S-006	1	O-RING
* 30	O-S-3-903	1	O-RING
31	TLN-40402-CP-F-INT	1	CATALYST TIP
* 32	O-E-011	1	O-RING
* 33	O-S-011	1	O-RING
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
35	TLN-2048	1	SEAT INSERT
* 36	O-A-007	1	O-RING
* 37	O-S-012	1	O-RING
38	TLN-2084	1	CATALYST CARTRIDGE
39	TLN-2082	1	CATALYST NEEDLE
40	TLN-2047	1	BALL SPRING
41	TLN-2049	1	NEEDLE SPRING
* 42	O-E-021	1	O-RING
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY
44	TLN-1097-02	1	HOUSING
45	TLN-1097-04	1	SPRING HOUSING
46	CV-1097-05	1	SPRING

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
47	CV-1097-03	1	CHECK VALVE PISTON
* 48	O-S-009A	1	O-RING
49	TLN-3003-01	1	HANDLE
50	TLN-2108-RC-01	1	TRIGGER MOUNT
51	TLN-2053	1	AIR KNOB HOUSING
52	07223	1	MALE CONNECTOR
* 53	O-E-003	1	O-RING
* 54	O-E-009	1	O-RING
55	MEC-RR-101	1	RETAINING RING
56	TLN-2054	1	AIR KNOB
57	TLN-1006	1	CATALYST FITTING
58	MS-2052-1	1	POLY TUBE
59	7701-6-14	1	STRAIGHT POLY FITTING
* 60	O-E-008	2	O-RING
61	04070-1	1	COMPRESSION SPRING
62	PF-SE-02-05T-45	1	ELBOW
63	7701-3-35	1	MALE CONNECTOR
64	6506-1-0.5	1	POLY AIR WHIP

REPAIR KIT

\* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A TLN-2120B-01 TRIGGER ARM - MODIFIED MATERIAL SIDE  
 65 TLN-X-CTR-C CATALYST CARTRIDGE ASSEMBLY  
 66 TLN-X-CTR-M MATERIAL CARTRIDGE ASSEMBLY  
 67 TLN-1097-01 CHECK VALVE

# MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX CHOP GUN

TLN2-XC-200

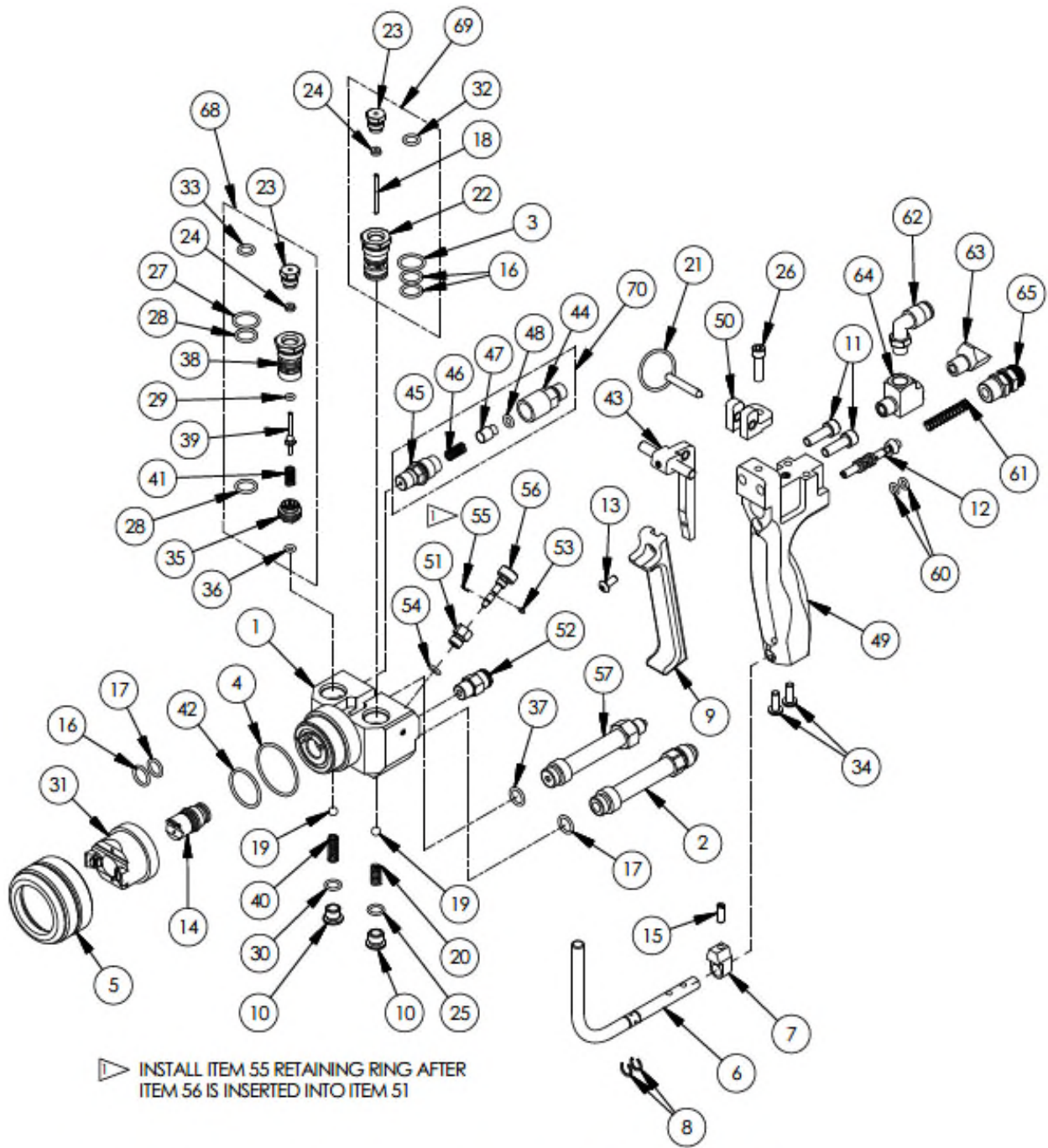
REV: A 08/27/2018

SHEET 3 / 3

1/17/2018







# MAGNUM VENUS PRODUCTS

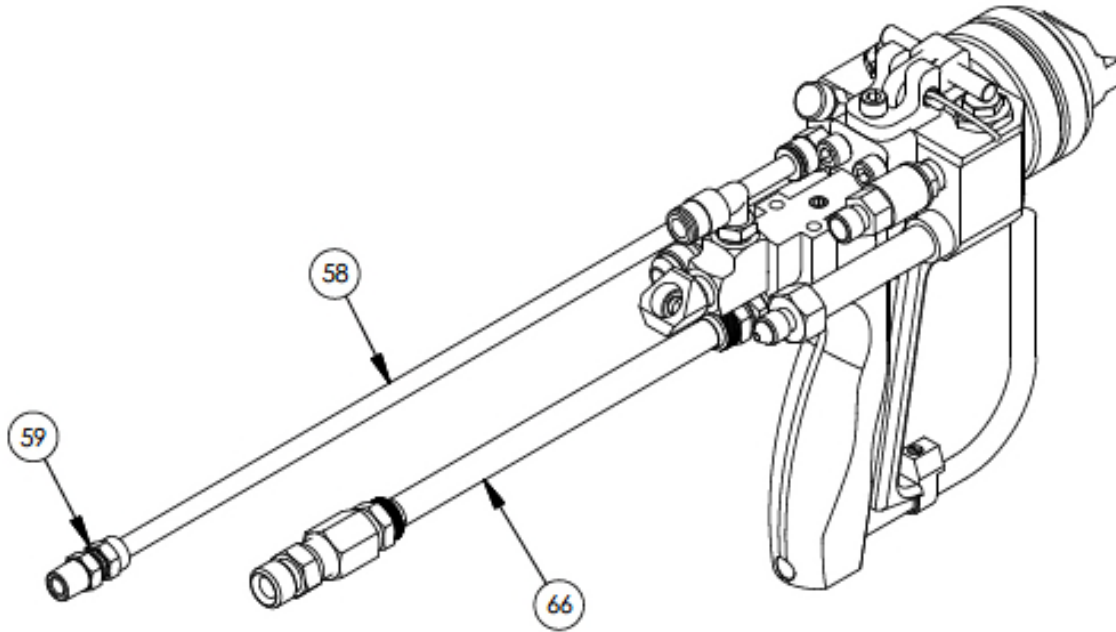
TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL

TLN2-XC-2005

REV: A 08/27/2018

SHEET 1 / 3

1/17/2018



## MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL

TLN2-XC-200S

REV: A 08/27/2018

SHEET 2 / 3

1/17/2018

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY
2	TLN-1005-F	1	FIT RESIN FITTING
* 3	O-E-015	1	O-RING
* 4	O-E-027	1	O-RING
5	TLN-2013	1	RETAINING RING
6	TLN-2009	1	TRIGGER GUARD
7	TLN-2036	1	TRIGGER STOP
8	TLN-1031	2	RETAINING RING
9	TLN-2065	1	TRIGGER
10	TLN-2006	2	PLUG
11	F-CS-04F-12	2	CAP SCREW
12	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW
14	TLN-XXXX	1	FIT TIP
15	LWG-6527	1	SPRING PLUNGER
* 16	O-E-013	3	O-RING
* 17	O-E-012	2	O-RING
18	TLN-2016	1	ACTUATING ROD
19	TLN-2043	2	CERAMIC BALL
20	TLN-2044	1	SPRING
21	F-QP-03-12	1	QUICK RELEASE PIN
22	TLN-2028-01	1	MATERIAL CARTRIDGE
23	TLN-2021	2	ROD SEAL HOUSING
* 24	TLN-2029	2	ROD SEAL ASSEMBLY
* 25	O-E-3-903	1	O-RING
26	F-CS-1224-12	1	CAP SCREW
* 27	O-S-015	1	O-RING
* 28	O-S-013	2	O-RING
* 29	O-S-006	1	O-RING
* 30	O-S-3-903	1	O-RING
31	TLN-40402-CP-F-INT	1	CATALYST TIP
* 32	O-E-011	1	O-RING
* 33	O-S-011	1	O-RING
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
35	TLN-2048	1	SEAT INSERT
* 36	O-A-007	1	O-RING
* 37	O-S-012	1	O-RING
38	TLN-2084	1	CATALYST CARTRIDGE
39	TLN-2082	1	CATALYST NEEDLE
40	TLN-2047	1	BALL SPRING
41	TLN-2049	1	NEEDLE SPRING
* 42	O-E-021	1	O-RING
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY
44	TLN-1097-02	1	HOUSING
45	TLN-1097-04	1	SPRING HOUSING
46	CV-1097-05	1	SPRING

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
47	CV-1097-03	1	CHECK VALVE PISTON
* 48	O-S-009A	1	O-RING
49	TLN-3003-01	1	HANDLE
50	TLN-2108-RC-01	1	TRIGGER MOUNT
51	TLN-2053	1	AIR KNOB HOUSING
52	07223	1	MALE CONNECTOR
* 53	O-E-003	1	O-RING
* 54	O-E-009	1	O-RING
55	MEC-RR-101	1	RETAINING RING
56	TLN-2054	1	AIR KNOB
57	TLN-1006	1	CATALYST FITTING
58	MS-2052-1	1	POLY TUBE
59	7701-6-14	1	STRAIGHT POLY FITTING
* 60	O-E-008	2	O-RING
61	04070-1	1	COMPRESSION SPRING
62	MPH-2539	1	MALE ELBOW
63	PF-SE-02-05T-45	1	ELBOW
64	PF-ST-02-BR	1	TEE FITTING
65	7701-3-35	1	MALE CONNECTOR
66	6506-1-0.5	1	POLY AIR WHIP

REPAIR KIT

\* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
68	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
69	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
70	TLN-1097-01	CHECK VALVE

# MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL

TLN2-XC-200S

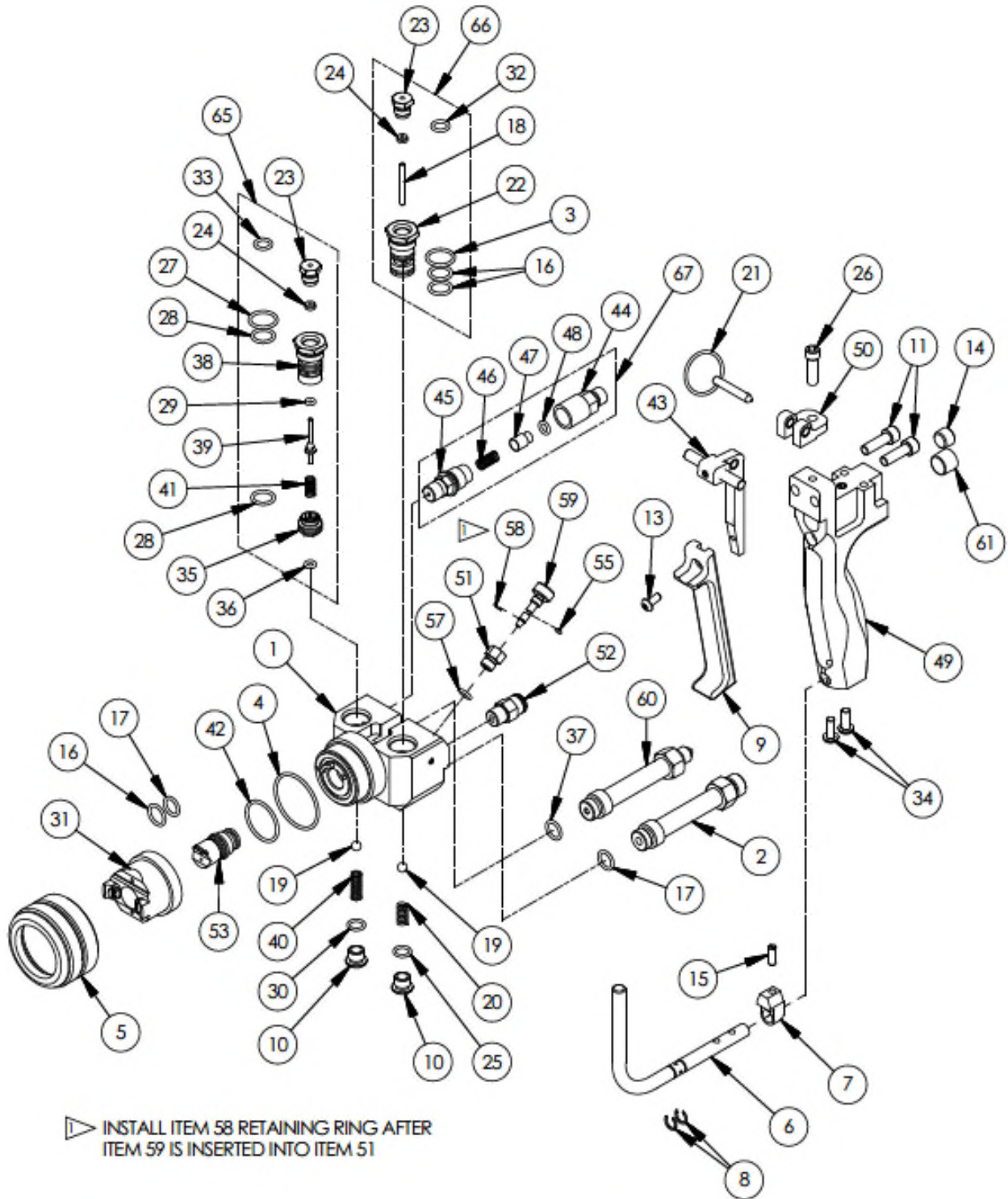
REV: A 08/27/2018

SHEET 3 / 3

1/17/2018







# MAGNUM VENUS PRODUCTS

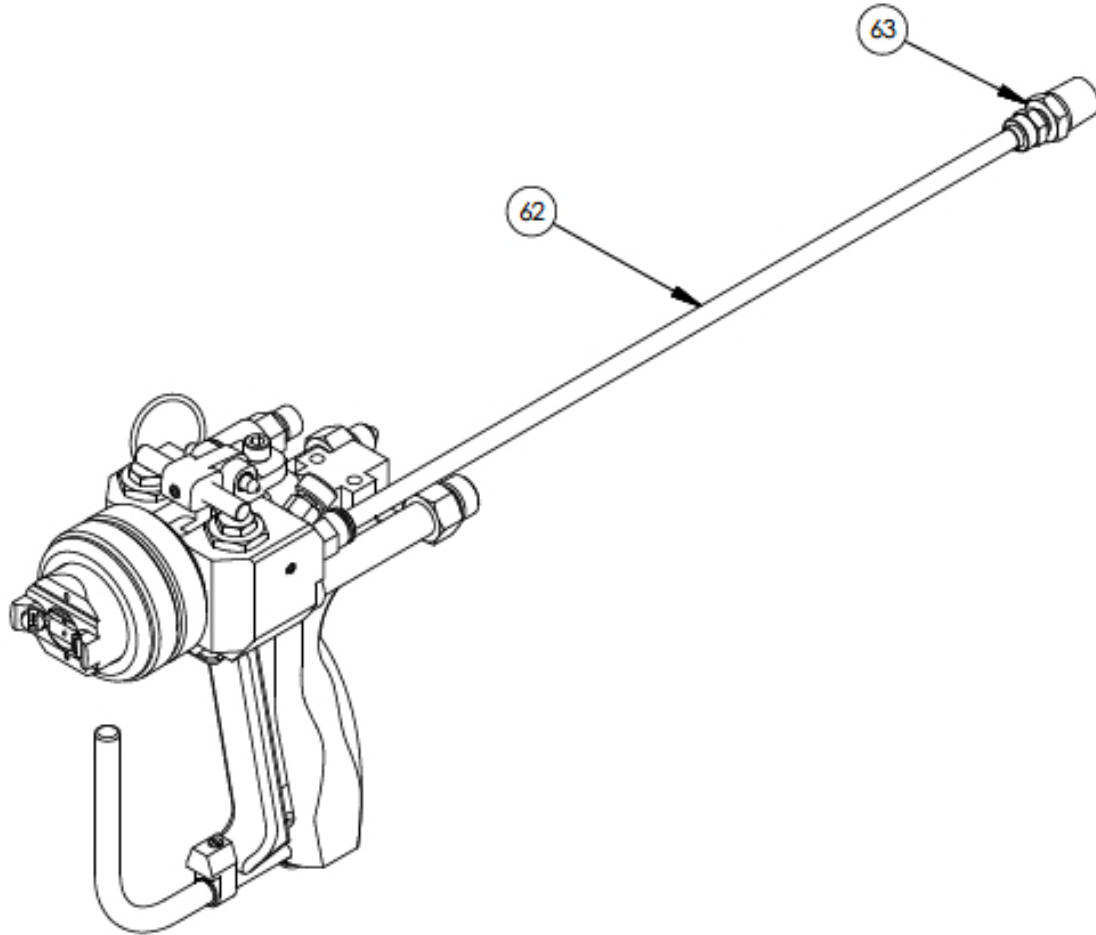
TALON EXTERNAL MIX FIT GEL GUN

TLN2-XG-200

REV: A 08/27/2018

SHEET 1 / 3

1/17/2018



## MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX FIT GEL GUN

TLN2-XG-200

REV: A 08/27/2018

SHEET 2 / 3

1/17/2018



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY
2	TLN-1005	1	RESIN FITTING
* 3	O-E-015	1	O-RING
* 4	O-E-027	1	O-RING
5	TLN-2013	1	RETAINING RING
6	TLN-2009	1	TRIGGER GUARD
7	TLN-2036	1	TRIGGER STOP
8	TLN-1031	2	RETAINING RING
9	TLN-2065	1	TRIGGER
10	TLN-2006	2	PLUG
11	F-CS-04F-12	2	CAP SCREW
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW
14	PF-AP-02	1	PIPE PLUG
15	LWG-6527	1	SPRING PLUNGER
* 16	O-E-013	3	O-RING
* 17	O-E-012	2	O-RING
18	TLN-2016	1	ACTUATING ROD
19	TLN-2043	2	CERAMIC BALL
20	TLN-2044	1	SPRING
21	F-GP-03-12	1	QUICK RELEASE PIN
22	TLN-2028-01	1	MATERIAL CARTRIDGE
23	TLN-2021	2	ROD SEAL HOUSING
* 24	TLN-2029	2	ROD SEAL ASSEMBLY
* 25	O-E-3-903	1	O-RING
26	F-CS-1224-12	1	CAP SCREW
* 27	O-S-015	1	O-RING
* 28	O-S-013	2	O-RING
* 29	O-S-006	1	O-RING
* 30	O-S-3-903	1	O-RING
31	TLN-40402-CP-F-INT	1	CATALYST TIP
* 32	O-E-011	1	O-RING
* 33	O-S-011	1	O-RING
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
35	TLN-2048	1	SEAT INSERT
* 36	O-A-007	1	O-RING
* 37	O-S-012	1	O-RING
38	TLN-2084	1	CATALYST CARTRIDGE
39	TLN-2082	1	CATALYST NEEDLE
40	TLN-2047	1	BALL SPRING
41	TLN-2049	1	NEEDLE SPRING
* 42	O-E-021	1	O-RING
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY
44	TLN-1097-02	1	HOUSING
45	TLN-1097-04	1	SPRING HOUSING
46	CV-1097-05	1	SPRING
47	CV-1097-03	1	CHECK VALVE PISTON
* 48	O-S-009A	1	O-RING
49	TLN-3003-01	1	HANDLE

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
50	TLN-2108-01	1	TRIGGER MOUNT
51	TLN-2053	1	AIR KNOB HOUSING
52	07223	1	MALE CONNECTOR
53	TLN-XXXX	1	FIT TIP
* 55	O-E-003	1	O-RING
* 57	O-E-009	1	O-RING
58	MEC-RR-101	1	RETAINING RING
59	TLN-2054	1	AIR KNOB
60	TLN-1006	1	CATALYST FITTING
61	PF-AP-04	1	ALLEN PLUG
62	MS-2052-1	1	POLY TUBE
63	00383	1	MALE CONNECTOR

REPAIR KIT

\* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
65	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

# MAGNUM VENUS PRODUCTS

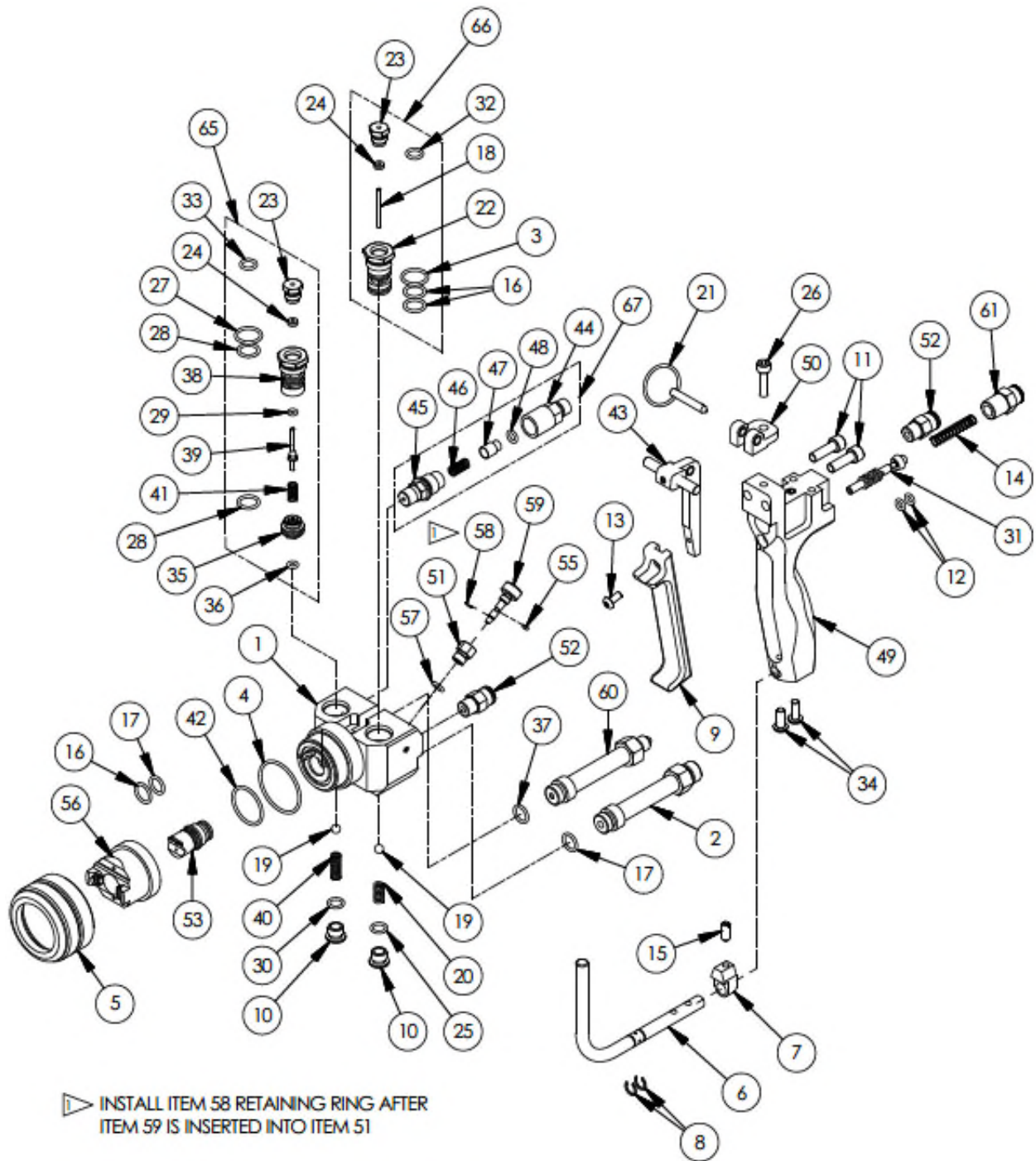
TALON EXTERNAL MIX FIT GEL GUN

TLN2-XG-200

REV: A 08/27/2018

SHEET 3 / 3

1/17/2018



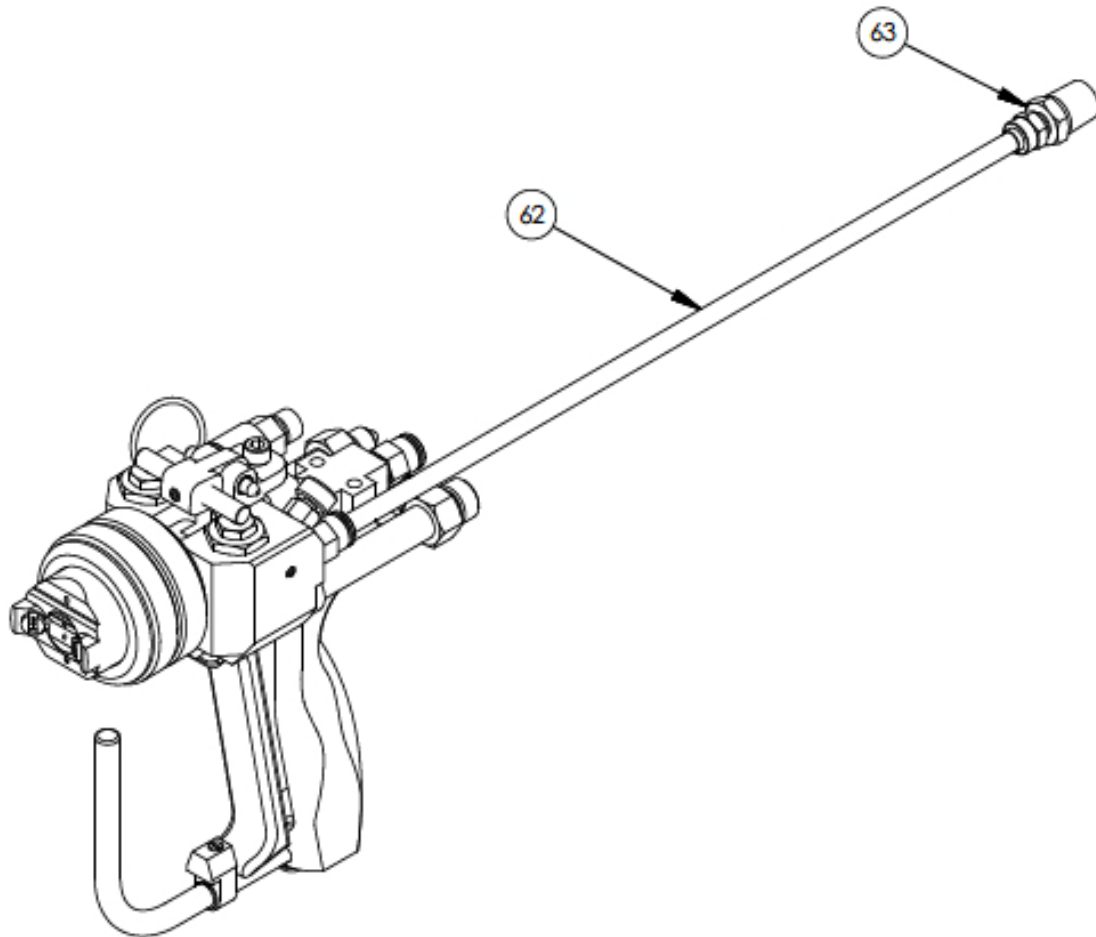
## MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX FIT GEL GUN WITH SIGNAL	TLN2-XG-2005
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REV: A 08/27/2018

SHEET 1 / 3

1/17/2018



## MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX FIT GEL GUN WITH SIGNAL

TLN2-XG-200S

REV: A 08/27/2018

SHEET 2 / 3

1/17/2018



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY
2	TLN-1005	1	RESIN FITTING
* 3	O-E-015	1	O-RING
* 4	O-E-027	1	O-RING
5	TLN-2013	1	RETAINING RING
6	TLN-2009	1	TRIGGER GUARD
7	TLN-2036	1	TRIGGER STOP
8	TLN-1031	2	RETAINING RING
9	TLN-2065	1	TRIGGER
10	TLN-2006	2	PLUG
11	F-CS-04F-12	2	CAP SCREW
* 12	O-E-008	2	O-RING
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW
14	04070-1	1	COMPRESSION SPRING
15	LWG-6527	1	SPRING PLUNGER
* 16	O-E-013	3	O-RING
* 17	O-E-012	2	O-RING
18	TLN-2016	1	ACTUATING ROD
19	TLN-2043	2	CERAMIC BALL
20	TLN-2044	1	SPRING
21	F-QP-03-12	1	QUICK RELEASE PIN
22	TLN-2028-01	1	MATERIAL CARTRIDGE
23	TLN-2021	2	ROD SEAL HOUSING
* 24	TLN-2029	2	ROD SEAL ASSEMBLY
* 25	O-E-3-903	1	O-RING
26	F-CS-1224-12	1	CAP SCREW
* 27	O-S-015	1	O-RING
* 28	O-S-013	2	O-RING
* 29	O-S-006	1	O-RING
* 30	O-S-3-903	1	O-RING
31	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL
* 32	O-E-011	1	O-RING
* 33	O-S-011	1	O-RING
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
35	TLN-2048	1	SEAT INSERT
* 36	O-A-007	1	O-RING
* 37	O-S-012	1	O-RING
38	TLN-2084	1	CATALYST CARTRIDGE
39	TLN-2082	1	CATALYST NEEDLE
40	TLN-2047	1	BALL SPRING
41	TLN-2049	1	NEEDLE SPRING
* 42	O-E-021	1	O-RING
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY
44	TLN-1097-02	1	HOUSING
45	TLN-1097-04	1	SPRING HOUSING
46	CV-1097-05	1	SPRING
47	CV-1097-03	1	CHECK VALVE PISTON
* 48	O-S-009A	1	O-RING

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
49	TLN-3003-01	1	HANDLE
50	TLN-2108-01	1	TRIGGER MOUNT
51	TLN-2053	1	AIR KNOB HOUSING
52	07223	2	MALE CONNECTOR
53	TLN-XXXX	1	FIT TIP
* 55	O-E-003	1	O-RING
* 56	TLN-40402-CP-F-INT	1	CATALYST TIP
* 57	O-E-009	1	O-RING
58	MEC-RR-101	1	RETAINING RING
59	TLN-2054	1	AIR KNOB
60	TLN-1006	1	CATALYST FITTING
61	TLN-2035	1	AIR INLET FITTING
62	MS-2052-1	1	POLY TUBE
63	00383	1	MALE CONNECTOR

REPAIR KIT

\* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
65	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

# MAGNUM VENUS PRODUCTS

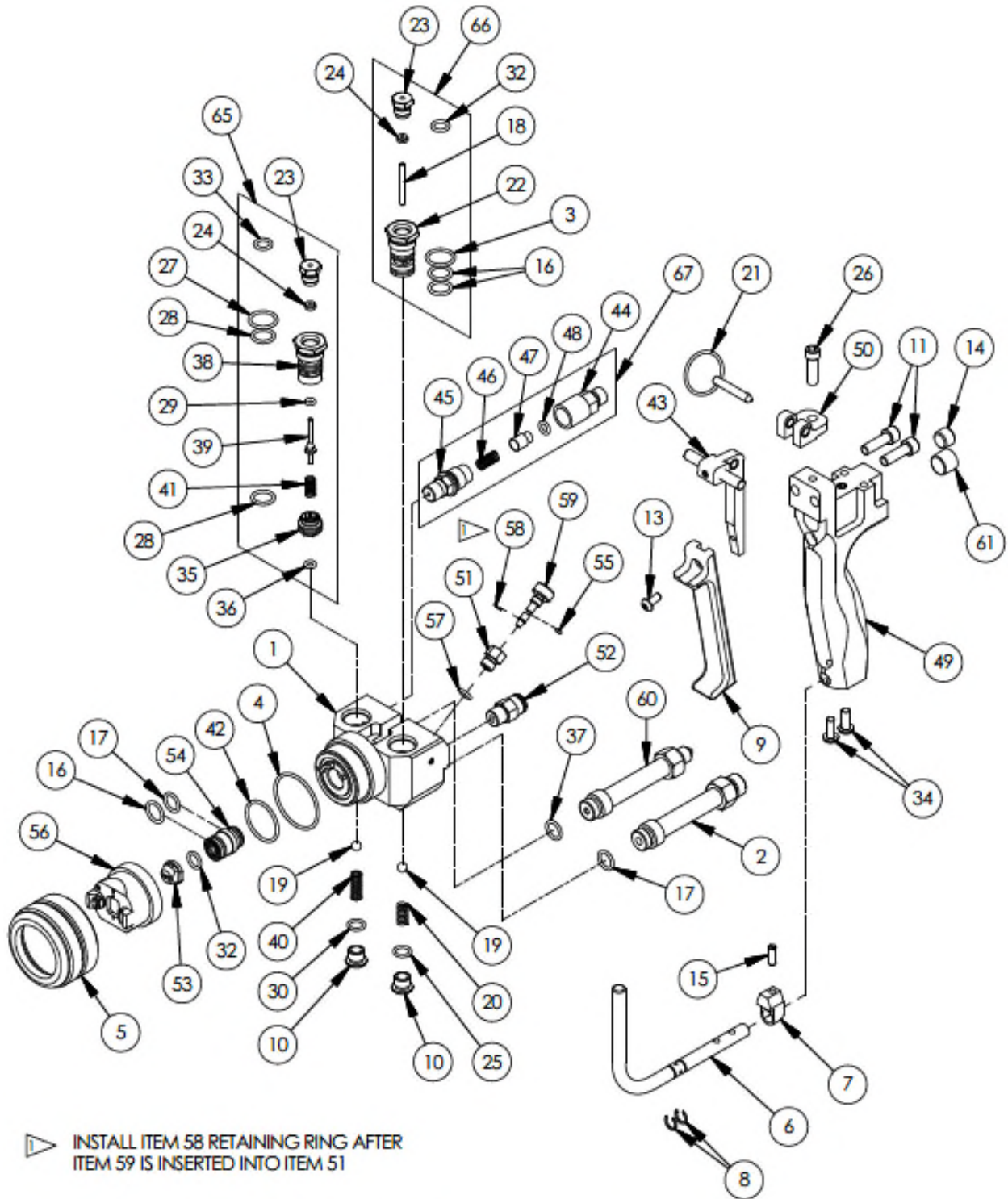
TALON EXTERNAL MIX FIT GEL GUN WITH SIGNAL

TLN2-XG-2005

REV: A 08/27/2018

SHEET 3 / 3

1/17/2018



# MAGNUM VENUS PRODUCTS

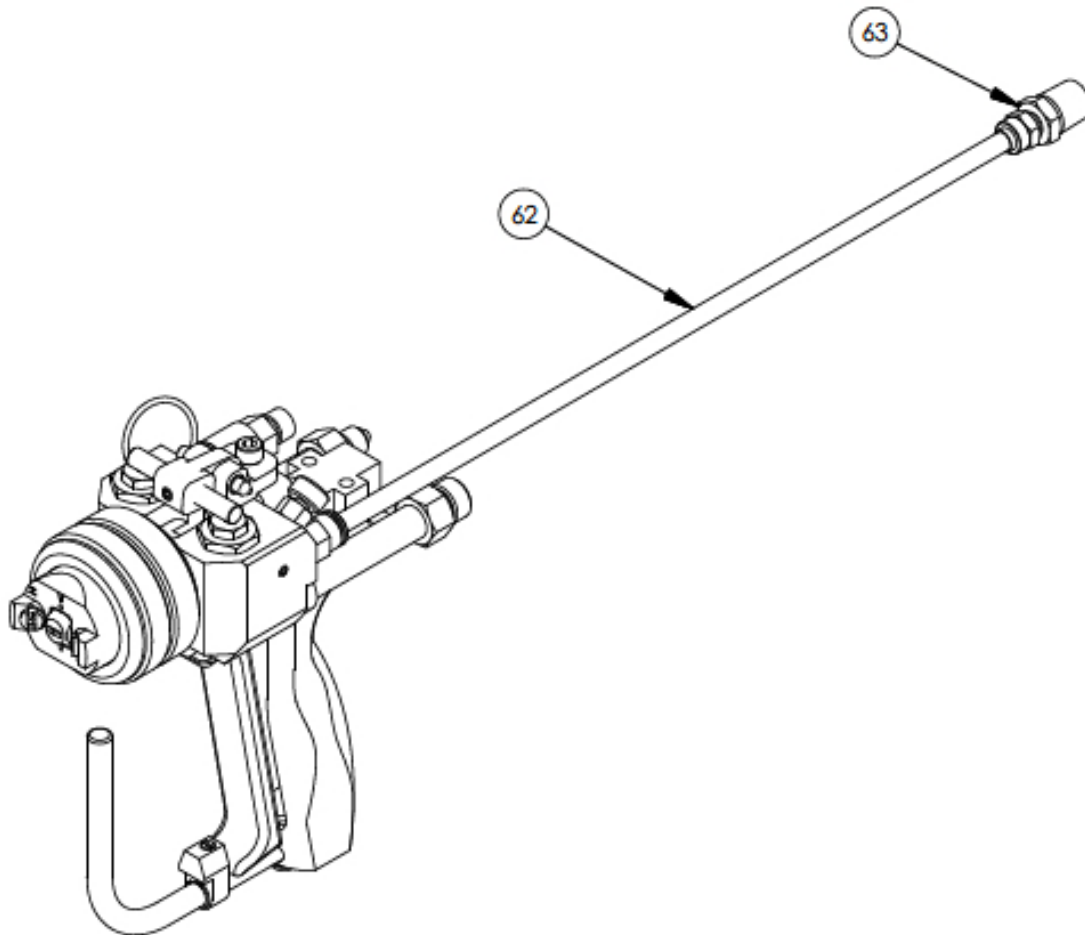
TALON EXTERNAL MIX GEL GUN

TLN2-XG-300

REV: A 08/28/2018

SHEET 1 / 3

1/17/2018



## MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX GEL GUN

TLN2-XG-300

REV: A 08/28/2018

SHEET 2 / 3

1/17/2018



Parts List				Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION	ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY	51	TLN-2053	1	AIR KNOB HOUSING
2	TLN-1005	1	RESIN FITTING	52	07223	1	MALE CONNECTOR
* 3	O-E-015	1	O-RING	53	TLN-XXX-M	1	SPRAY TIP
* 4	O-E-027	1	O-RING	54	TLN-2055	1	RESIN PORT
5	TLN-2013	1	RETAINING RING	* 55	O-E-003	1	O-RING
6	TLN-2009	1	TRIGGER GUARD	* 56	TLN-30402-CP-INT	1	CATALYST TIP
7	TLN-2036	1	TRIGGER STOP	* 57	O-E-009	1	O-RING
8	TLN-1031	2	RETAINING RING	58	MEC-RR-101	1	RETAINING RING
9	TLN-2065	1	TRIGGER	59	TLN-2054	1	AIR KNOB
10	TLN-2006	2	PLUG	60	TLN-1006	1	CATALYST FITTING
11	F-CS-04F-12	2	CAP SCREW	61	PF-AP-04	1	ALLEN PLUG
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW	62	MS-2052-1	1	POLY TUBE
14	PF-AP-02	1	PIPE PLUG	63	00383	1	MALE CONNECTOR
15	LWG-6527	1	SPRING PLUNGER				
* 16	O-E-013	3	O-RING				
* 17	O-E-012	2	O-RING				
18	TLN-2016	1	ACTUATING ROD				
19	TLN-2043	2	CERAMIC BALL				
20	TLN-2044	1	SPRING				
21	F-GP-03-12	1	QUICK RELEASE PIN				
22	TLN-2028-01	1	MATERIAL CARTRIDGE				
23	TLN-2021	2	ROD SEAL HOUSING				
* 24	TLN-2029	2	ROD SEAL ASSEMBLY				
* 25	O-E-3-903	1	O-RING				
26	F-CS-1224-12	1	CAP SCREW				
* 27	O-S-015	1	O-RING				
* 28	O-S-013	2	O-RING				
* 29	O-S-006	1	O-RING				
* 30	O-S-3-903	1	O-RING				
* 32	O-E-011	2	O-RING				
* 33	O-S-011	1	O-RING				
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW				
35	TLN-2048	1	SEAT INSERT				
* 36	O-A-007	1	O-RING				
* 37	O-S-012	1	O-RING				
38	TLN-2084	1	CATALYST CARTRIDGE				
39	TLN-2082	1	CATALYST NEEDLE				
40	TLN-2047	1	BALL SPRING				
41	TLN-2049	1	NEEDLE SPRING				
* 42	O-E-021	1	O-RING				
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY				
44	TLN-1097-02	1	HOUSING				
45	TLN-1097-04	1	SPRING HOUSING				
46	CV-1097-05	1	SPRING				
47	CV-1097-03	1	CHECK VALVE PISTON				
* 48	O-S-009A	1	O-RING				
49	TLN-3003-01	1	HANDLE				
50	TLN-2108-01	1	TRIGGER MOUNT				

REPAIR KIT

\* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
65	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

# MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX GEL GUN

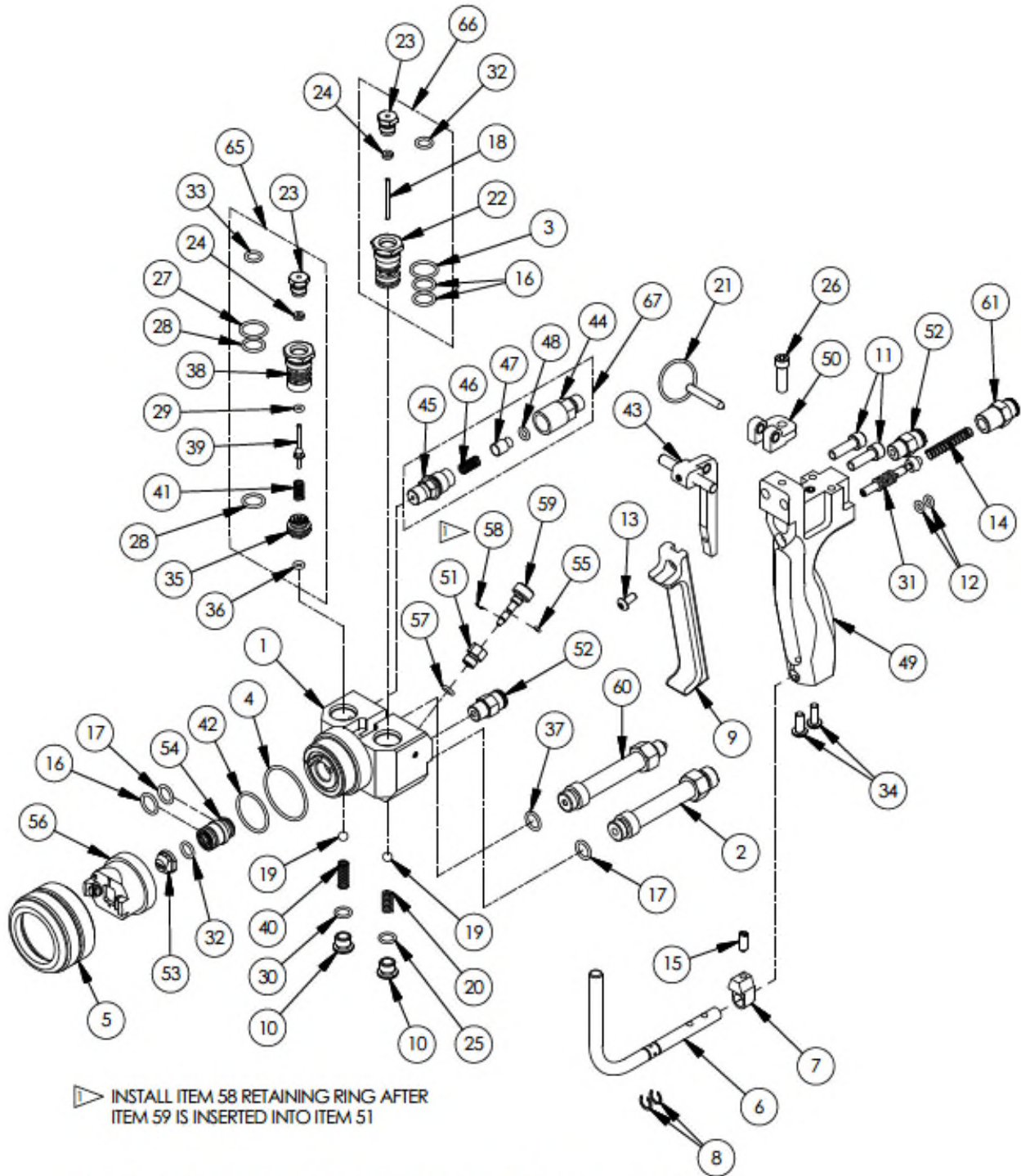
TLN2-XG-300

REV: A 08/28/2018

SHEET 3 / 3

1/17/2018





# MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX GELCOAT GUN WITH SIGNAL

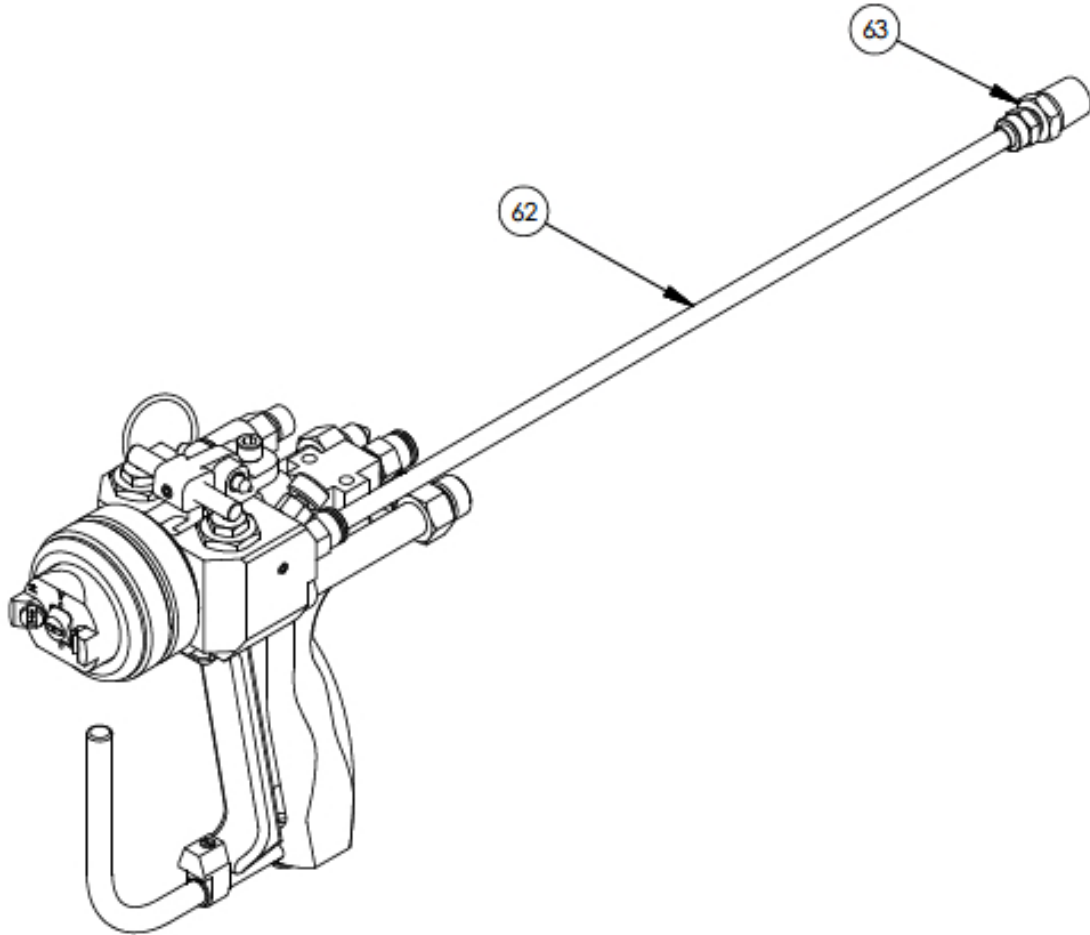
TLN2-XG-300S

REV: A 08/28/2018

SHEET 1 / 3

1/17/2018





## MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX GELCOAT GUN WITH SIGNAL

TLN2-XG-300S

REV: A 08/28/2018

SHEET 2 / 3

1/17/2018

Parts List				Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION	ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY	52	07223	2	MALE CONNECTOR
2	TLN-1005	1	RESIN FITTING	53	TLN-XXX-M	1	SPRAY TIP
* 3	O-E-015	1	O-RING	54	TLN-2055	1	RESIN PORT
* 4	O-E-027	1	O-RING	* 55	O-E-003	1	O-RING
5	TLN-2013	1	RETAINING RING	* 56	TLN-30402-CP-INT	1	CATALYST TIP
6	TLN-2009	1	TRIGGER GUARD	* 57	O-E-009	1	O-RING
7	TLN-2036	1	TRIGGER STOP	58	MEC-RR-101	1	RETAINING RING
8	TLN-1031	2	RETAINING RING	59	TLN-2054	1	AIR KNOB
9	TLN-2065	1	TRIGGER	60	TLN-1006	1	CATALYST FITTING
10	TLN-2006	2	PLUG	61	TLN-2035	1	AIR INLET FITTING
11	F-CS-04F-12	2	CAP SCREW	62	MS-2052-1	1	POLY TUBE
* 12	O-E-008	2	O-RING	63	00383	1	MALE CONNECTOR
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW				
14	04070-1	1	COMPRESSION SPRING				
15	LWG-6527	1	SPRING PLUNGER				
* 16	O-E-013	3	O-RING				
* 17	O-E-012	2	O-RING				
18	TLN-2016	1	ACTUATING ROD				
19	TLN-2043	2	CERAMIC BALL				
20	TLN-2044	1	SPRING				
21	F-QP-03-12	1	QUICK RELEASE PIN				
22	TLN-2028-01	1	MATERIAL CARTRIDGE				
23	TLN-2021	2	ROD SEAL HOUSING				
* 24	TLN-2029	2	ROD SEAL ASSEMBLY				
* 25	O-E-3-903	1	O-RING				
26	F-CS-1224-12	1	CAP SCREW				
* 27	O-S-015	1	O-RING				
* 28	O-S-013	2	O-RING				
* 29	O-S-006	1	O-RING				
* 30	O-S-3-903	1	O-RING				
31	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL				
* 32	O-E-011	2	O-RING				
* 33	O-S-011	1	O-RING				
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW				
35	TLN-2048	1	SEAT INSERT				
* 36	O-A-007	1	O-RING				
* 37	O-S-012	1	O-RING				
38	TLN-2084	1	CATALYST CARTRIDGE				
39	TLN-2082	1	CATALYST NEEDLE				
40	TLN-2047	1	BALL SPRING				
41	TLN-2049	1	NEEDLE SPRING				
* 42	O-E-021	1	O-RING				
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY				
44	TLN-1097-02	1	HOUSING				
45	TLN-1097-04	1	SPRING HOUSING				
46	CV-1097-05	1	SPRING				
47	CV-1097-03	1	CHECK VALVE PISTON				
* 48	O-S-009A	1	O-RING				
49	TLN-3003-01	1	HANDLE				
50	TLN-2108-01	1	TRIGGER MOUNT				
51	TLN-2053	1	AIR KNOB HOUSING				

REPAIR KIT

\* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
65	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

# MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX GELCOAT GUN WITH SIGNAL

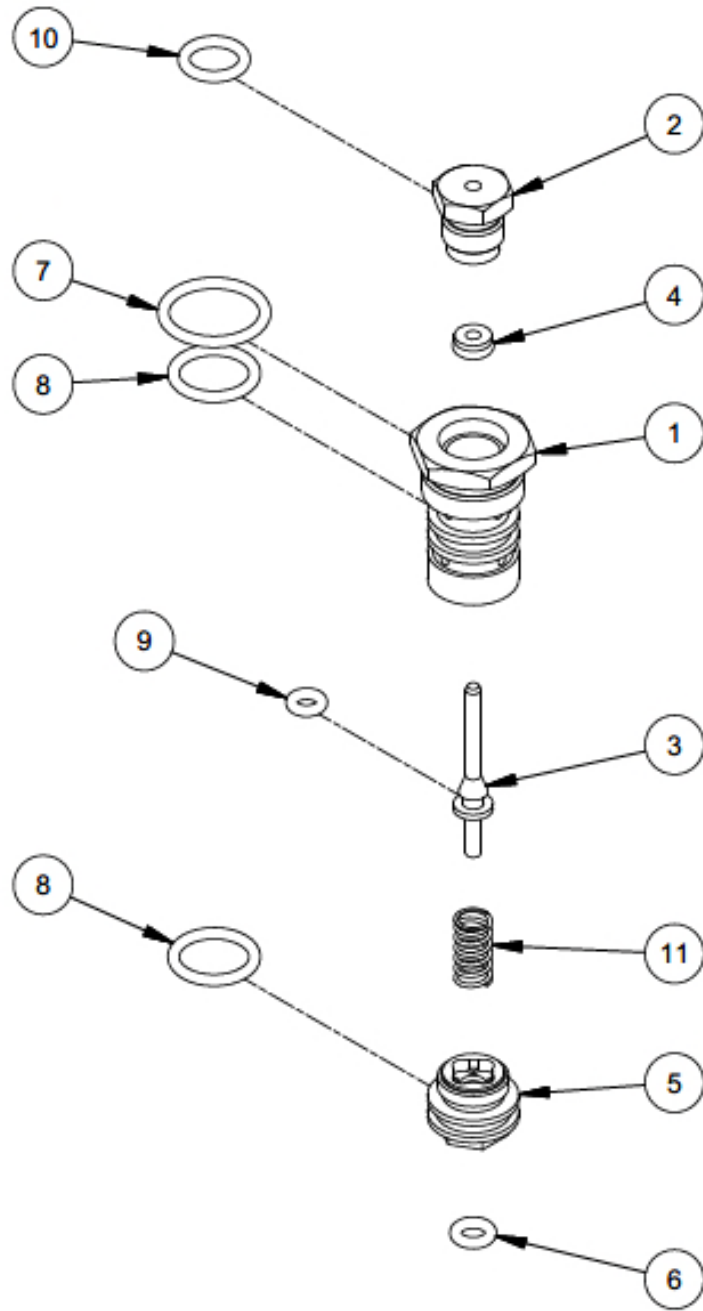
TLN2-XG-300S

REV: A 08/28/2018

SHEET 3 / 3

1/17/2018





# MAGNUM VENUS PLASTECH

CATALYST CARTRIDGE ASSEMBLY	TLN-X-CTR-C
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REV:

SHEET 1 / 2

3/6/2014

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-2084	1	CATALYST CARTRIDGE
2	TLN-2021	1	ROD SEAL HOUSING
3	TLN-2082	1	CATALYST NEEDLE
4	TLN-2029	1	ROD SEAL ASSEMBLY
5	TLN-2048	1	SEAT INSERT
6	O-A-007	1	O-RING
7	O-S-015	1	O-RING
8	O-S-013	2	O-RING
9	O-S-006	1	O-RING
10	O-S-011	1	O-RING
11	TLN-2049	1	NEEDLE SPRING

## MAGNUM VENUS PLASTECH

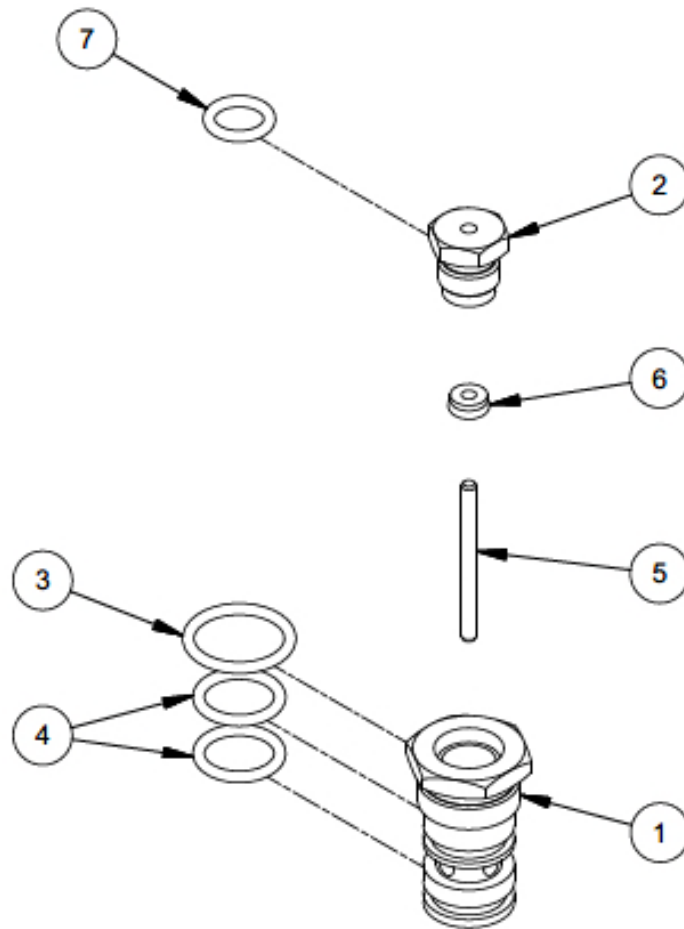
CATALYST CARTRIDGE ASSEMBLY

TLN-X-CTR-C

REV:

SHEET 2 / 2

3/6/2014



# MAGNUM VENUS PLASTECH

MATERIAL CARTRIDGE ASSEMBLY

TLN-X-CTR-M

REV:

SHEET 1 / 2

3/6/2014

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-2028-01	1	MATERIAL CARTRIDGE
2	TLN-2021	1	ROD SEAL HOUSING
3	O-E-015	1	O-RING
4	O-E-013	2	O-RING
5	TLN-2016	1	ACTUATING ROD
6	TLN-2029	1	ROD SEAL ASSEMBLY
7	O-E-011	1	O-RING

# MAGNUM VENUS PLASTECH

MATERIAL CARTRIDGE ASSEMBLY

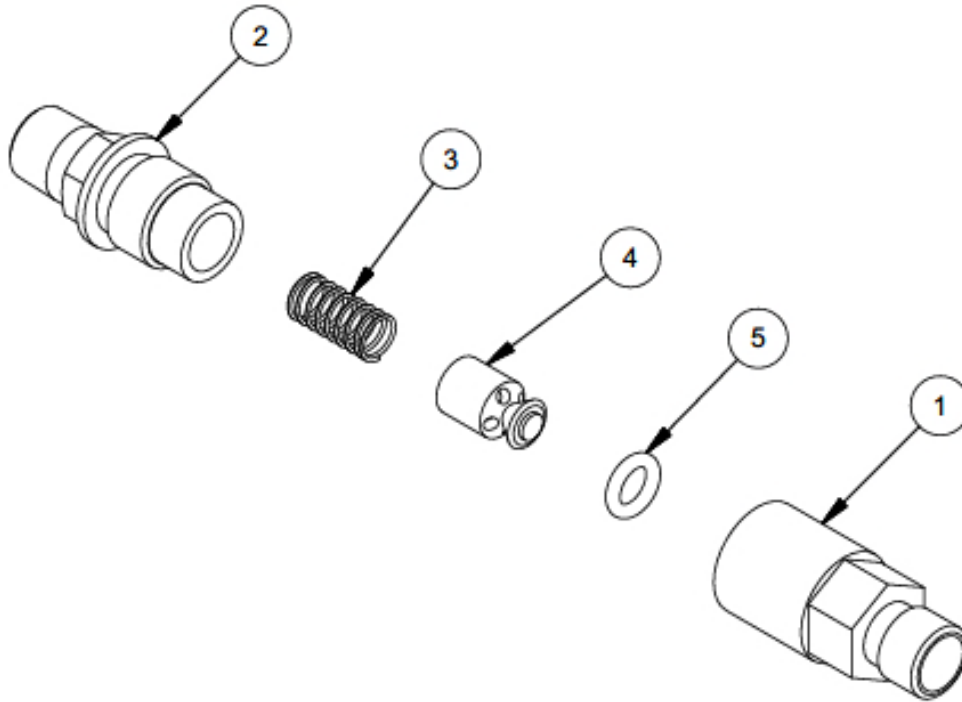
TLN-X-CTR-M

REV:

SHEET 2 / 2

3/6/2014





# MAGNUM VENUS PLASTECH

TALON GUN CHECK VALVE

TLN-1097-01

REV:

SHEET 1 / 2

12/19/2014

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-1097-02	1	HOUSING
2	TLN-1097-04	1	SPRING HOUSING
3	CV-1097-05	1	SPRING
4	CV-1097-03	1	CHECK VALVE PISTON
5	O-S-009A	1	O-RING

# MAGNUM VENUS PLASTECH

TALON GUN CHECK VALVE

TLN-1097-01

REV:

SHEET 2 / 2

12/19/2014


TLN2-X-SK  
SEAL KIT – TALON EXTERNAL MIX GUNS

1 PC  O-A-007 O-RING

1 PCS  O-E-003 O-RING

2 PCS  O-E-008 O-RING

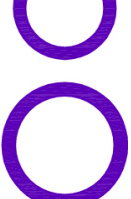
1 PC  O-E-009 O-RING

1 PC  O-E-3-903 O-RING  
SEPARATE BAG

1 PC  O-E-011 O-RING


2 PCS  O-E-012 O-RING

3 PCS  O-E-013 O-RING

1 PC  O-E-015 O-RING

1 PC  O-S-006 O-RING


1 PC  O-S-009A O-RING

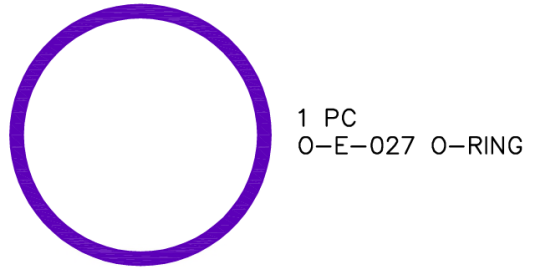
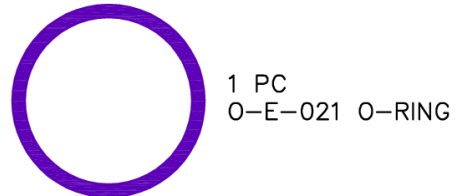
1 PC  O-S-3-903 O-RING  
SEPARATE BAG

1 PC  O-S-011 O-RING

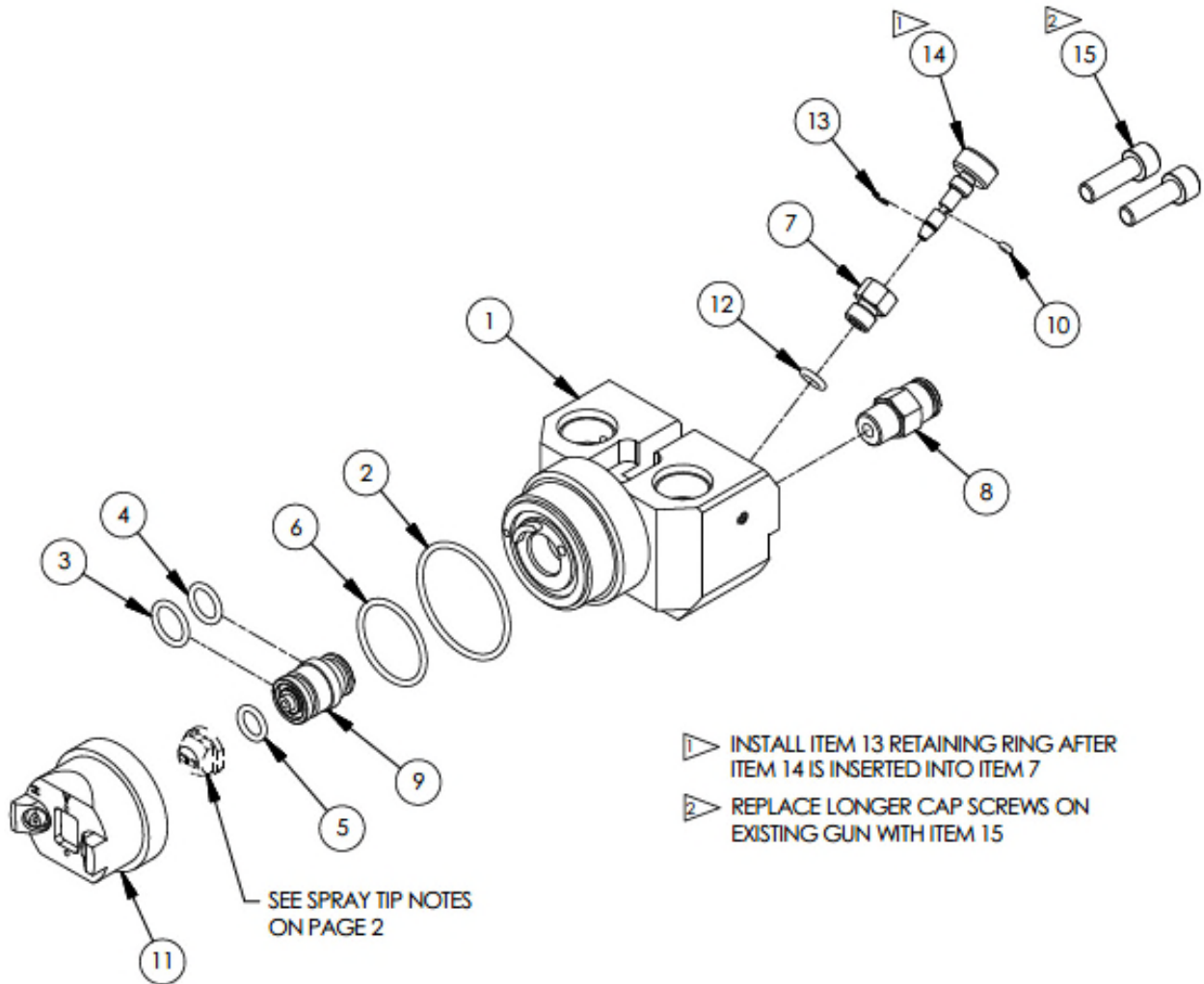
1 PC  O-S-012 O-RING

2 PCS  O-S-013 O-RING

1 PC  O-S-015 O-RING



TOP VIEW  2 PCS  
SIDE VIEW  TLN-2029 SEAL



## MAGNUM VENUS PRODUCTS

TLN TO TLN2 CONVERSION KIT

TLN-X-TLN2-CK

REV: A 01/03/2018

SHEET 1 / 2

1/17/2018

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY
2	O-E-027	1	O-RING
3	O-E-013	1	O-RING
4	O-E-012	1	O-RING
5	O-E-011	1	O-RING
6	O-E-021	1	O-RING
7	TLN-2053	1	AIR KNOB HOUSING
8	07223	1	MALE CONNECTOR
9	TLN-2055	1	RESIN PORT
10	O-E-003	1	O-RING
11	TLN-30402-CP	1	CATALYST TIP
12	O-E-009	1	O-RING
13	MEC-RR-101	1	RETAINING RING
14	TLN-2054	1	AIR KNOB
15	F-CS-04F-12	2	CAP SCREW

TLN-XXX-M SPRAY TIP IS NOT INCLUDED IN CONVERSION KIT  
 AVAILABLE OPTIONS FOR SPRAY TIP:

- |           |           |           |
|-----------|-----------|-----------|
| TLN-418-M | TLN-419-M | TLN-421-M |
| TLN-423-M | TLN-515-M | TLN-517-M |
| TLN-518-M | TLN-519-M | TLN-521-M |
| TLN-523-M | TLN-526-M | TLN-531-M |
| TLN-536-M | TLN-518-M | TLN-619-M |
| TLN-621-M | TLN-623-M | TLN-626-M |
| TLN-631-M |           |           |

## MAGNUM VENUS PRODUCTS

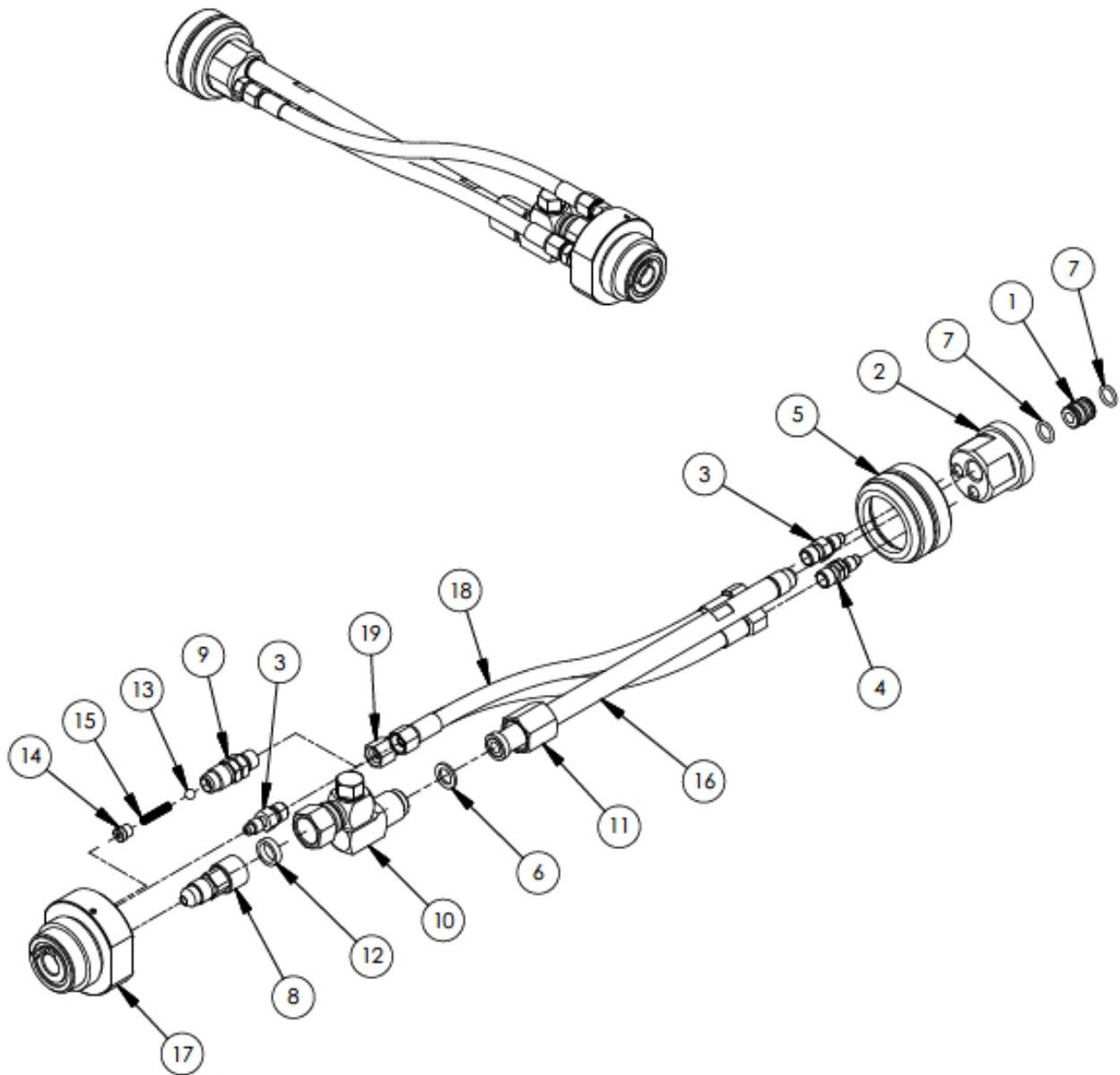
TLN TO TLN2 CONVERSION KIT

TLN-X-TLN2-CK

REV: A 01/03/2018

SHEET 2 / 2

1/17/2018



# MAGNUM VENUS PRODUCTS

EXTENSION ASSEMBLY	EXT-1000-TLN
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REV: -

SHEET 1 / 2

2/2/2018



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	EXT-1806	1	SEAL BODY
2	EXT-1803-TLN	1	GUN HEAD ADAPTER
3	ATC-40213	2	AIR FITTING
4	ATC-40214	1	CATALYST FITTING
5	TLN-2013	1	RETAINING RING
6	02149-1	1	NOZZLE SEAL
7	O-E-012	2	O-RING
8	EXT-1807	1	CONNECTOR
9	EXT-1808	1	CHECK VALVE
10	EXT-1802	1	SWIVEL JOINT
11	EXT-1805	1	SWIVEL NUT
12	EXT-1007	1	TIP GASKET
13	9201-1-7	1	SS BALL 7/32"
14	4101-17-1	1	SPRING RETAINER
15	4101-16-1	1	COMPRESSION SPRING
16	EXT-1001	1	EXTENSION TUBE
17	EXT-1809-TLN	1	REMOTE GUN HEAD
18	HA-0222-1	1	AIR HOSE
19	HC-0222-1	1	CATALYST HOSE

## MAGNUM VENUS PRODUCTS

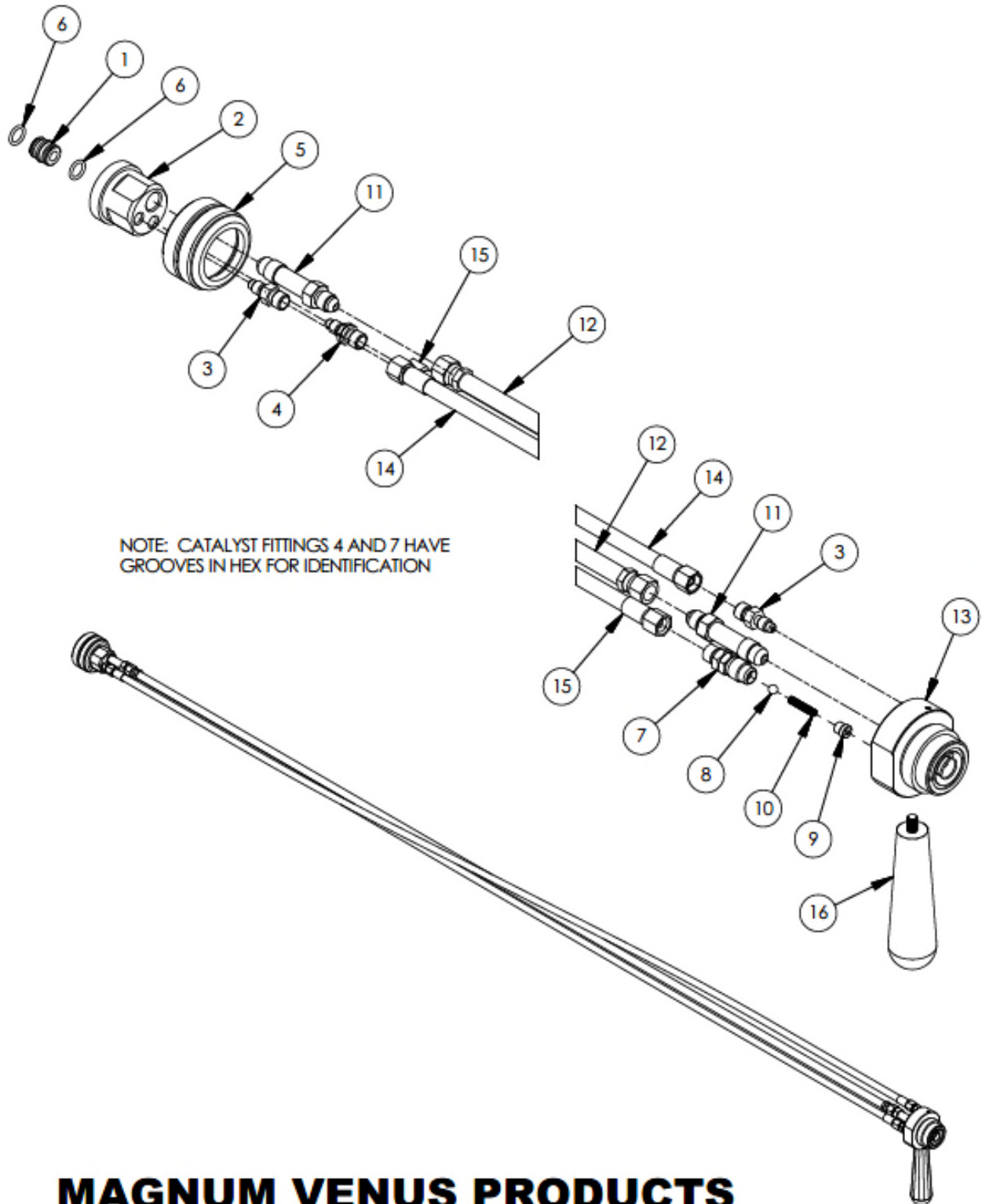
EXTENSION ASSEMBLY

EXT-1000-TLN

REV: -

SHEET 2 / 2

2/2/2018



# MAGNUM VENUS PRODUCTS

FLEX EXTENSION ASSEMBLY	EXT-FLEX-TLN-5
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REV:

SHEET 1 / 2

2/2/2018

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	EXT-1806	1	SEAL BODY
2	EXT-1803-TLN	1	GUN HEAD ADAPTER
3	ATC-40213	2	AIR FITTING
4	ATC-40214	1	CATALYST FITTING
5	TLN-2013	1	RETAINING RING
6	O-E-012	2	O-RING
7	EXT-1808	1	CHECK VALVE
8	9201-1-7	1	SS BALL 7/32"
9	4101-17-1	1	SPRING RETAINER
10	4101-16-1	1	COMPRESSION SPRING
11	HF-05J-04J-L	2	FITTING
12	HCSS-044J4J-5	1	SS HOSE ASSEMBLY
13	EXT-1809-TLN	1	REMOTE GUN HEAD
14	HA-0222-5	1	AIR HOSE
15	HC-0222-5	1	CATALYST HOSE
16	EXT-1810	1	HANDLE

## MAGNUM VENUS PRODUCTS

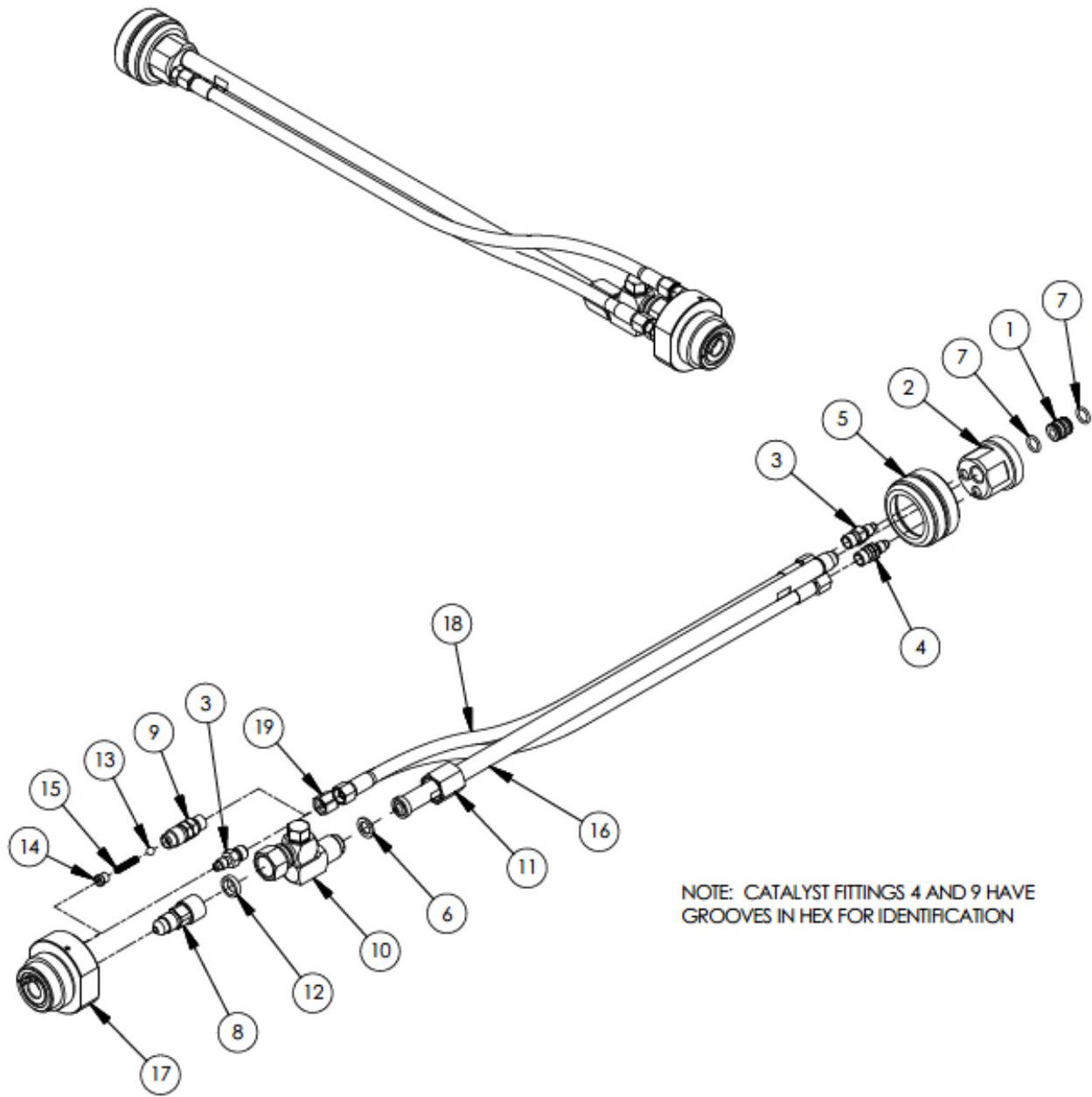
FLEX EXTENSION ASSEMBLY

EXT-FLEX-TLN-5

REV:

SHEET 2 / 2

2/2/2018



# MAGNUM VENUS PRODUCTS

EXTENSION ASSEMBLY	EXT-1800-TLN
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REV:

SHEET 1 / 2

2/2/2018

Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	EXT-1806	1	SEAL BODY
2	EXT-1803-TLN	1	GUN HEAD ADAPTER
3	ATC-40213	2	AIR FITTING
4	ATC-40214	1	CATALYST FITTING
5	TLN-2013	1	RETAINING RING
6	02149-1	1	NOZZLE SEAL
7	O-E-012	2	O-RING
8	EXT-1807	1	CONNECTOR
9	EXT-1808	1	CHECK VALVE
10	EXT-1802	1	SWIVEL JOINT
11	EXT-1805	1	SWIVEL NUT
12	EXT-1007	1	TIP GASKET
13	9201-1-7	1	SS BALL 7/32"
14	4101-17-1	1	SPRING RETAINER
15	4101-16-1	1	COMPRESSION SPRING
16	EXT-1801	1	EXTENSION TUBE
17	EXT-1809-TLN	1	REMOTE GUN HEAD
18	HA-0222-1.67	1	AIR HOSE
19	HC-0222-1.67	1	CATALYST HOSE

## MAGNUM VENUS PRODUCTS

EXTENSION ASSEMBLY

EXT-1800-TLN

REV:

SHEET 2 / 2

2/2/2018





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